

BRISTOL BAY SOCKEYE SALMON  
SPAWNING ESCAPEMENT TEST FISHING, 1994 - 1998



by

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## ABSTRACT

Drift gillnets were fished daily at two stations, located on opposite river banks, prior to every high slack tide in Kvichak, Egegik, Ugashik, and Igushik Rivers, Bristol Bay, Alaska, from mid-June to mid-July to estimate sockeye salmon spawning escapements for the years 1994-1998. Preliminary estimates were used by fishery managers as an in-season management tool to regulate commercial harvests and achieve escapement goals. The daily test fish index for each river was the mean of catch per unit effort values obtained from all test drifts made on a given day. Numbers of sockeye salmon that escaped the commercial fishery were estimated using (1) travel time analysis in which the most recent cumulative tower count was divided by cumulative test fish indices and lagged back in time by daily increments, and (2) the mean escapement per index point (EPI) value. Mean EPI estimates were available on the first day of each project. Travel time estimates could not be made until 5 d of test fishing data and tower counts were collected.

**KEY WORDS:** Sockeye salmon *Onchorhynchus nerka*, test fishing, spawning escapement estimation, estimation, fisheries management, Bristol Bay

## INTRODUCTION

River test fishing conducted by the Alaska Department of Fish and Game (ADF&G) is used to estimate numbers of salmon that have escaped commercial fishing districts and entered their natal streams. In Bristol Bay, river test fisheries are used to manage sockeye salmon *Onchorhynchus nerka* fisheries (Figure 1). Test-fishery data are available approximately 1 d after sockeye salmon have passed through the commercial fishing district and several days earlier than estimates based on visual counts from observation towers located at the heads of the river systems. Spawning escapement estimates based on test-fish data assist management biologists in regulating commercial fishing periods to maximize harvests and achieve escapement goals. Test-fishing projects have been operated on Kvichak River since 1960, on Egegik River since 1963, on Ugashik River since 1961, and on Igushik River since 1976 (McBride 1978; Paulus 1965). This report summarizes 1994 – 1998 test-fish data and evaluates the accuracy of forecasting methods used during these seasons.

## METHODS

### *Test Fishing*

Two stations on opposite river banks were fished in the lower section of Kvichak, Egegik, Ugashik, and Igushik Rivers, 1994 – 1998 (Table 1). Test-fish stations were close to the commercial fishing district boundary but above sockeye salmon milling areas. Stations fished at all four rivers have remained the same since 1987 (Fried and Bue 1988a).

Gillnets were drifted at all test-fish sites to estimate sockeye salmon abundance. All drifts were made perpendicular and close to shore because sockeye salmon migrate parallel to and near the river bank. Drifts at all stations were ended when about 30 sockeye were caught or when the inshore end of the net drifted about 25 m offshore and lost efficiency. Two short drifts of <15 min duration were made at each Igushik River station beginning about 1.5 h before every high slack tide for the entire season to minimize currents carrying the gillnet offshore. Two drifts were made at each station beginning about 1.5 h before every high slack tide early in the season at Egegik and Ugashik Rivers. When the estimated sockeye escapement reached 10-15% of the point goal, only one drift was made at each station for the remainder of the year. One drift was made at each Kvichak River station about 1.5 h before every high slack tide for the entire season.

All gillnets were 45.7 m (150 ft or 25 fathoms) in length and 29 meshes deep. Monotwist web, hung even with #50 twine and dyed Momoi shade #1, was used for test fishing on all rivers. Multistrand monofilament was used until 1989; however, this web type is now illegal for commercial use and is no longer stocked by suppliers. A stretched mesh size of 12.70 cm (5 in) was used on Kvichak River and 13.02 cm (5-1/8 in) was used on Egegik, Ugashik, and Igushik Rivers.

Catch per unit of effort (CPUE), or the number of sockeye salmon caught in 180 m (600 ft or 100 fathoms) of gillnet fished for 1 h, was estimated for each set.

Age, weight and length (AWL) data were collected in 1994 and 1995 at all test fish locations. This practice was discontinued thereafter since AWL data collected at the counting towers is believed to be more representative of the escapement. Water temperature (°C) was recorded at all rivers on every high tide prior to test fishing.

### *Data Analyses*

Mean fishing time (MT), in minutes, was calculated for each set as

$$MT = SI - FO + \frac{(FO - SO) + (FI - SI)}{2}, \quad (1)$$

where:

SO = time the gillnet first entered water,

FO = time the gillnet was fully deployed,

SI = time the gillnet retrieval began, and

FI = time the gillnet retrieval completed.

The CPUE value,  $C_j$  or the number of sockeye salmon caught per 100 fathom hours, was calculated for set  $j$  as follows:

$$C_j = 6,000 \frac{N}{G \times MT}, \quad (2.1)$$

where:

N = number of sockeye salmon caught, and

G = gillnet length in fathoms.

Then the daily test fish index,  $I_i$ , for day  $i$  was calculated as the mean of individual CPUE values obtained from sets made the same day, or

$$I_i = \frac{\sum_{j=1}^s C_j}{S}, \quad (2.2)$$

where

$S$  = number of sets made during day  $i$  (usually four sets per day).

Two methods were used to estimate daily spawning escapements: (1) travel-time ( $EPI_d$ ), and (2) mean EPI value ( $EPI_a$ ).

Travel-time estimates of spawning escapements were based on the number of days it took sockeye salmon to travel from test fish sites to counting tower sites. A range of travel-time estimates was calculated by matching daily test-fish indices to daily tower counts. The number of sockeye salmon represented by each index point was calculated by dividing the most recent cumulative tower count by cumulative test-fish indices lagged back in time by daily increments such that

$$EPI_d = \frac{\sum_{i=1}^t E_i}{\sum_{i=1}^{t-d} I_i}, \quad (3)$$

where:

$EPI_d$  = number of sockeye salmon represented by each test fishing index point based on a travel-time of  $d$  days,

$E_i$  = number of sockeye salmon traveling past counting tower on day  $i$ , and

$t$  = day of most recent escapement estimate.

The best initial estimate of travel time produced the smallest squared sum of errors between daily cumulative test-fish indices and tower counts. However, travel times that seemed unrealistic based on results of past studies or produced unreasonable escapement estimates (e.g., less than observed escapement) were rejected even if they produced the best statistical fit to the data.

Total spawning escapement was then estimated as

$$\hat{E}_{t+d} = EPI_d \sum_{i=1}^t I_i, \quad (4)$$



where

$E_{t+d}$  = estimated number of sockeye salmon that will travel past counting tower on day  $t+d$ .

Three statistics were used to measure performance of the various escapement estimators. Percent error, PE, was used to measure daily performance:

$$PE = 100 \times \frac{T_{t,a} - \sum_{i=1}^{t+d} E_i}{\sum_{i=1}^{t+d} E_i}, \quad (5)$$

where

$T_{t,a}$  = estimated cumulative spawning escapement on day  $t$  based on method  $a$ .

Mean percent error, MPE, was used to measure bias:

$$MPE = \sum_{i=1}^n \left( \frac{100 \times T_{t,a} - \sum_{i=1}^{t+d} E_i}{\sum_{i=1}^{t+d} E_i} \right), \quad (6)$$

where

$n$  = total number of days that escapement estimates based on test fishing were available

Mean absolute percent error, MAPE, was used to measure overall accuracy because it treated under- and over-estimation errors similarly:

$$MAPE = \sum_{i=1}^n \left| \left( 100 \times \frac{T_{t,a} - \sum_{i=1}^{t+d} E_i}{\frac{\sum_{i=1}^{t+d} E_i}{n}} \right) \right| \quad (7)$$

## RESULTS

### *1994*

#### **Kvichak River**

Test fishing began 22 June and ended 15 July. A total of 1,548 sockeye salmon were caught, producing 55,073 index points (Table 2, Appendix A.1.). Test fish escapement estimates for 24 to 30 June were based on the 1985-93 mean EPI value of 108 (Table 2, Appendix F.1.). Sufficient spawning escapement data were collected by 1 July to allow estimation of EPI values based on travel time (Table 2). Estimated travel times during the season ranged from 1 to 2 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 142 (Appendix F.1.).

Daily escapement estimates based on the 1985-93 mean EPI (24 - 30 June) ranged from 60% less to 203% greater than visual counts from towers, assuming actual travel time was 2 d (Table 2). Daily escapement estimates based on travel time analysis (1 - 15 July) ranged from 18% less to 2% greater than tower counts (Table 2, Figure 2). The travel time analysis estimate of 7,820,436 sockeye salmon on 15 July was 2% greater than the lagged cumulative tower count (17 July) of 7,631,076.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 33% and 9% respectively (Table 2). When the comparison was restricted to travel time analysis only (1 to 15 July) accuracy and bias improved to 9% and -8% respectively.

#### **Egegik River**

Test fishing began 15 June and ended 12 July. A total of 1,410 sockeye salmon were caught producing a cumulative index of 12,777 (Table 3, Appendix A.2.). Test fish escapement estimates for 15 to 25 June were based on the 1985-93 mean EPI value of 73 (Table 3, Appendix F.2.). Sufficient spawning escapement data were collected by 26 June to allow estimation of EPI values based on travel time (Table 3). Estimated travel times during this period ranged from 1 to 4 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 137 (Appendix F.2.).

Daily escapement estimates based on the 1985-93 mean EPI (20 - 25 June) ranged from 8% less to 5,510% greater than visual counts from towers, assuming actual travel time was 2 d (Table 3). Daily escapement estimates based on travel time analysis (26 June to 12 July) ranged from 35% less to 72% greater than tower counts (Table 3, Figure 3). The travel time analysis estimate of

1,750,449 sockeye salmon on 12 July was 2% greater than the lagged cumulative tower count on 14 July of 1,708,998.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 503% and 489% respectively (Table 3). When the comparison was restricted to travel time analysis only (26 June to 12 July), accuracy and bias improved to 17% and 0% respectively.

### **Ugashik River**

Test fishing began 25 June and ended 17 July. A total of 973 sockeye salmon were caught producing a cumulative index of 8,180 (Table 4, Appendix A.3.). Test fish escapement estimates for 25 June to 9 July were based on the 1985-93 mean EPI value of 53 (Table 4, Appendix F.3.). Sufficient spawning escapement data were collected by 10 July to allow estimation of EPI values based on travel time (Table 4). Estimated travel times during this period ranged from 1 to 2 d. On the last day of project operation, the best estimate of travel time was 1 d and the EPI was 94 (Appendix F.3.).

Daily escapement estimates based on the 1985-93 mean EPI (2 - 9 July) ranged from 17% less to 2,829% greater than visual counts from towers, assuming actual travel time was 1 d (Table 4). Daily escapement estimates based on travel time analysis (10 - 17 July) ranged from 22% less to 23% greater than tower counts (Table 4, Figure 4). The travel time analysis estimate of 768,920 sockeye salmon on 17 July was less than 1% greater than the lagged cumulative tower count on 18 July of 766,638.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 382% and 376% respectively (Table 4). When the comparison was restricted to travel time analysis only (10 - 17 July), accuracy and bias improved to 10% and 2% respectively.

### **Igushik River**

Test fishing began 17 June and ended 13 July. A total of 574 sockeye salmon were caught producing a cumulative index of 2,343 (Table 5, Appendix A.4.). Test fish escapement estimates for 17 - 25 June were based on the 1988-89, 1991-93 mean EPI value of 187 (Table 5, Appendix F.4.). Sufficient spawning escapement data were collected by 26 June to allow estimation of EPI values based on travel time (Table 5). Estimated travel times during this period ranged from 2 to 5 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 108 (Appendix F.4.).

Daily escapement estimates based on the historic mean EPI (20 - 25 June) ranged from 60% to 744% greater than visual counts from towers, assuming actual travel time was 2 d (Table 5). Daily escapement estimates based on travel time analysis (26 June to 13 July) ranged from 34% less to 434% greater than tower counts (Table 5, Figure 5). The travel time analysis estimate of 253,044 sockeye salmon on 13 July was 16% less than the lagged cumulative tower count on 15 July of 301,446.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 186% and 180% respectively (Table 5). When the comparison was restricted to travel time analysis only (26 June – 13 July), accuracy and bias improved to 129% and 121% respectively.

## **1995**

### **Kvichak River**

Test fishing began 21 June and ended 18 July. A total of 3,241 sockeye salmon were caught, producing 62,556 index points (Table 6, Appendix B.1.). Test fish escapement estimates for 21 to 29 June were based on the 1985-94 mean EPI value of 111 (Table 6, Appendix F.1.). Sufficient spawning escapement data were collected by 30 June to allow estimation of EPI values based on travel time (Table 6). Estimated travel times during the season ranged from 1 to 2 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 154 (Appendix F.1.).

Daily escapement estimates based on the 1985-94 mean EPI (23 - 29 June) ranged from 97% less to 640% greater than visual counts from towers, assuming actual travel time was 2 d (Table 6). Daily escapement estimates based on travel time analysis (30 June to 18 July) ranged from 13% less to 3% greater than tower counts (Table 6, Figure 6). The travel time analysis estimate of 9,633,624 sockeye salmon on 18 July was 1% less than the lagged cumulative tower count (20 July) of 9,702,972.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 33% and 20% respectively (Table 6). When the comparison was restricted to travel time analysis only (30 June to 18 July) accuracy and bias improved to 4% and -3% respectively.

### **Egegik River**

Test fishing began 16 June and ended 12 July. A total of 1,541 sockeye salmon were caught producing a cumulative index of 11,769 (Table 7, Appendix B.2.). Test fish escapement

estimates for 17 to 25 June were based on the 1985-94 mean EPI value of 79 (Table 7, Appendix F.2.). Sufficient spawning escapement data were collected by 26 June to allow estimation of EPI values based on travel time (Table 7). Estimated travel times during this period ranged from 1 to 3 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 100 (Appendix F.2.).

Daily escapement estimates based on the 1985-94 mean EPI (17 - 25 June) ranged from 9% to 6,379% greater than visual counts from towers, assuming actual travel time was 2 d (Table 7). Daily escapement estimates based on travel time analysis (26 June to 12 July) ranged from 64% less to 12% greater than tower counts (Table 7, Figure 7). The travel time analysis estimate of 1,176,900 sockeye salmon on 12 July was 3% greater than the lagged cumulative tower count on 14 July of 1,139,724.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 343% and 332% respectively (Table 7). When the comparison was restricted to travel time analysis only (26 June to 12 July), accuracy and bias improved to 10% and -7% respectively.

### **Ugashik River**

Test fishing began 24 June and ended 19 July. A total of 1,649 sockeye salmon were caught producing a cumulative index of 9,609 (Table 8, Appendix B.3.). Test fish escapement estimates for 24 June to 6 July were based on the 1985-94 mean EPI value of 80 (Table 8, Appendix F.3.). Sufficient spawning escapement data were collected by 7 July to allow estimation of EPI values based on travel time (Table 8). Estimated travel times during this period ranged from 3 to 4 d. On the last day of project operation, the best estimate of travel time was 3 d and the EPI was 66 (Appendix F.3.).

Daily escapement estimates based on the 1985-94 mean EPI (30 June to 6 July) ranged from 11% less to 264% greater than visual counts from towers, assuming actual travel time was 3 d (Table 8). Daily escapement estimates based on travel time analysis (7 - 17 July) ranged from 55% less to 30% greater than tower counts (Table 8, Figure 8). The travel time analysis estimate of 634,194 sockeye salmon on 17 July was 44% less than the lagged cumulative tower count on 20 July of 1,136,262.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 59% and 39% respectively (Table 8). When the comparison was restricted to travel time analysis only (7 - 17 July), accuracy and bias improved to 27% and -3% respectively.

## **Igushik River**

Test fishing began 18 June and ended 8 July. A total of 887 sockeye salmon were caught producing a cumulative index of 3,609 (Table 9, Appendix B.4.). Test fish escapement estimates for 18 – 27 June were based on the 1991-92, 94 mean EPI value of 87 (Table 9, Appendix F.4.). Sufficient spawning escapement data were collected by 28 June to allow estimation of EPI values based on travel time (Table 9). Estimated travel times during this period ranged from 2 to 3 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 105 (Appendix F.4.).

Daily escapement estimates based on the historic mean EPI (21 - 27 June) ranged from 70% less to 99% greater than visual counts from towers, assuming actual travel time was 2 d (Table 9). Daily escapement estimates based on travel time analysis (28 June to 8 July) ranged from 7% less to 95% greater than tower counts (Table 9, Figure 9). The travel time analysis estimate of 378,945 sockeye salmon on 8 July was 9% greater than the lagged cumulative tower count on 10 July of 349,110.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 32% and 0% respectively (Table 9). When the comparison was restricted to travel time analysis only (28 June – 8 July), accuracy improved to 19% and bias worsened to 16%.

## **1996**

### **Kvichak River**

Test fishing began 21 June and ended 17 July. A total of 2,005 sockeye salmon were caught, producing 18,089 index points (Table 10, Appendix C.1.). Test fish escapement estimates for 21 to 27 June were based on the 1985-95 mean EPI value of 93 (Table 10, Appendix F.1.). Sufficient spawning escapement data were collected by 28 June to allow estimation of EPI values based on travel time (Table 10). Estimated travel times during the season ranged from 1 to 3 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 77 (Appendix F.1.).

Daily escapement estimates based on the 1985-95 mean EPI (22 - 27 June) ranged from 80% less to 564% greater than visual counts from towers, assuming actual travel time was 2 d (Table 10). Daily escapement estimates based on travel time analysis (28 June to 17 July) ranged from 30% less to 54% greater than tower counts (Table 10, Figure 10). The travel time analysis estimate of 1,392,853 sockeye salmon on 17 July was 1% less than the lagged cumulative tower count (19 July) of 1,396,710.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 43% and 9% respectively (Table 10). When the comparison was restricted to travel time analysis only (28 June to 17 July) accuracy and bias improved to 12% and -1% respectively.

### **Egegik River**

Test fishing began 15 June and ended 12 July. A total of 2,115 sockeye salmon were caught producing a cumulative index of 15,043 (Table 11, Appendix C.2.). Test fish escapement estimates for 15 to 23 June were based on the 1985-95 mean EPI value of 80 (Table 11, Appendix F.2.). Sufficient spawning escapement data were collected by 24 June to allow estimation of EPI values based on travel time (Table 11). Estimated travel times during this period ranged from 1 to 4 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 72 (Appendix F.2.).

Daily escapement estimates based on the 1985-95 mean EPI (17 - 23 June) ranged from 83% to 741% greater than visual counts from towers, assuming actual travel time was 2 d (Table 11). Daily escapement estimates based on travel time analysis (24 June to 12 July) ranged from 36% less to 122% greater than tower counts (Table 11, Figure 11). The travel time analysis estimate of 1,083,096 sockeye salmon on 12 July was 4% greater than the lagged cumulative tower count on 14 July of 1,042,128.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 110% and 98% respectively (Table 11). When the comparison was restricted to travel time analysis only (24 June to 12 July), accuracy and bias improved to 23% and 6% respectively.

### **Ugashik River**

Test fishing began 23 June and ended 18 July. A total of 1,945 sockeye salmon were caught producing a cumulative index of 18,617 (Table 12, Appendix C.3.). Test fish escapement estimates for 23 June to 4 July were based on the 1985-95 mean EPI value of 95 (Table 12, Appendix F.3.). Sufficient spawning escapement data were collected by 5 July to allow estimation of EPI values based on travel time (Table 12). Estimated travel times during this period ranged from 2 to 5 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 36 (Appendix F.3.).

Daily escapement estimates based on the 1985-95 mean EPI (1 - 4 July) ranged from 221% to 644% greater than visual counts from towers, assuming actual travel time was 2 d (Table 12). Daily escapement estimates based on travel time analysis (5 - 18 July) ranged from 14% less to

38% greater than tower counts (Table 12, Figure 12). The travel time analysis estimate of 670,212 sockeye salmon on 18 July was 10% greater than the lagged cumulative tower count on 20 July of 610,926.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 96% and 93% respectively (Table 12). When the comparison was restricted to travel time analysis only (5 – 18 July), accuracy and bias improved to 15% and 12% respectively.

### **Igushik River**

Test fishing began 15 June and ended 12 July. A total of 1,103 sockeye salmon were caught producing a cumulative index of 5,295 (Table 13, Appendix C.4.). Test fish escapement estimates for 15 – 27 June were based on the 1991, 92, 94, 95 mean EPI value of 92 (Table 13, Appendix F.4.). Sufficient spawning escapement data was collected by 28 June to allow estimation of EPI values based on travel time (Table 13). Estimated travel times during this period were steady at 3 d. On the last day of project operation, the best estimate of travel time was 3 d and the EPI was 62 (Appendix F.4.).

Daily escapement estimates based on the historic mean EPI (21 - 27 June) ranged from 67% less to 74% greater than visual counts from towers, assuming actual travel time was 3 d (Table 13). Daily escapement estimates based on travel time analysis (28 June to 12 July) ranged from 21% less to 24% greater than tower counts (Table 13, Figure 13). The travel time analysis estimate of 328,290 sockeye salmon on 12 July was 9% greater than the lagged cumulative tower count on 15 July of 300,222.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 23% and 9% respectively (Table 13). When the comparison was restricted to travel time analysis only (28 June – 12 July), accuracy and bias improved to 8% and 0% respectively.

## **1997**

### **Kvichak River**

Test fishing began 21 June and ended 16 July. A total of 3,113 sockeye salmon were caught, producing 25,228 index points (Table 14, Appendix D.1.). Test fish escapement estimates for 21 June to 2 July were based on the 1985-96 mean EPI value of 84 (Table 14, Appendix F.1.). Sufficient spawning escapement data were collected by 3 July to allow estimation of EPI values



based on travel time (Table 14). Estimated travel times during the season ranged from 1 to 2 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 58 (Appendix F.1.).

Daily escapement estimates based on the 1985-96 mean EPI (22 June to 2 July) ranged from 87% to 42% less than visual counts from towers, assuming actual travel time was 2 d (Table 14). Daily escapement estimates based on travel time analysis (3 – 16 July) ranged from 15% less to 24% greater than tower counts (Table 14, Figure 14). The travel time analysis estimate of 1,463,224 sockeye salmon on 16 July was 2% greater than the lagged cumulative tower count (18 July) of 1,434,504.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 37% and -32% respectively (Table 14). When the comparison was restricted to travel time analysis only (3 - 16 July) accuracy and bias improved to 6% and 2% respectively.

### **Egegik River**

Test fishing began 15 June and ended 12 July. A total of 2,885 sockeye salmon were caught producing a cumulative index of 20,136 (Table 15, Appendix D.2.). Test fish escapement estimates for 15 to 22 June were based on the 1985-96 mean EPI value of 80 (Table 15, Appendix F.2.). Sufficient spawning escapement data were collected by 23 June to allow estimation of EPI values based on travel time (Table 15). Estimated travel times during this period ranged from 1 to 4 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 52 (Appendix F.2.).

Daily escapement estimates based on the 1985-96 mean EPI (17 - 22 June) ranged from 182% to 675% greater than visual counts from towers, assuming actual travel time was 2 d (Table 15). Daily escapement estimates based on travel time analysis (23 June to 12 July) ranged from 35% less to 22% greater than tower counts (Table 15, Figure 15). The travel time analysis estimate of 1,047,072 sockeye salmon on 12 July was 1% less than the lagged cumulative tower count on 14 July of 1,051,500.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 84% and 69% respectively (Table 15). When the comparison was restricted to travel time analysis only (23 June to 12 July), accuracy and bias improved to 13% and -6% respectively.

### **Ugashik River**

Test fishing began 24 June and ended 18 July. A total of 2,005 sockeye salmon were caught producing a cumulative index of 21,969 (Table 16, Appendix D.3.). Test fish escapement

estimates for 24 June to 6 July were based on half of the 1985-96 mean EPI value of 60 (Table 16, Appendix F.3.). This adjustment was made early in the season based on aerial surveys which did not support the historic EPI. Sufficient spawning escapement data were collected by 7 July to allow estimation of EPI values based on travel time (Table 16). Estimated travel times during this period ranged from 2 to 3 d. On the last day of project operation, the best estimate of travel time was 3 d and the EPI was 22 (Appendix F.3.).

Daily escapement estimates based on the 1985-96 mean EPI (29 June - 6 July) ranged from 49% less to 4,043% greater than visual counts from towers, assuming actual travel time was 3 d (Table 16). Daily escapement estimates based on travel time analysis (7 - 18 July) ranged from 1% less to 32% greater than tower counts (Table 16, Figure 16). The travel time analysis estimate of 483,318 sockeye salmon on 18 July was 1% greater than the lagged cumulative tower count on 21 July of 481,356.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 293% and 286% respectively (Table 16). When the comparison was restricted to travel time analysis only (7 - 18 July), accuracy and bias improved to 8% and 8% respectively.

### **Igushik River**

Test fishing began 17 June and ended 14 July. A total of 2,855 sockeye salmon were caught producing a cumulative index of 10,543 (Table 17, Appendix D.4.). Test fish escapement estimates for 17 - 26 June were based on the 1991, 92, 94-96 mean EPI value of 86 (Table 17, Appendix F.4.). Sufficient spawning escapement data were collected by 27 June to allow estimation of EPI values based on travel time (Table 17). Estimated travel times during this period ranged from 3 - 7 d. On the last day of project operation, the best estimate of travel time was 3 d and the EPI was 12 (Appendix F.4.).

Daily escapement estimates based on the historic mean EPI (20 - 26 June) ranged from 710% to 2,803% greater than visual counts from towers, assuming actual travel time was 3 d (Table 17). Daily escapement estimates based on travel time analysis (27 June to 14 July) ranged from 2% less to 100% greater than tower counts (Table 17, Figure 17). The travel time analysis estimate of 126,516 sockeye salmon on 14 July was 30% greater than the lagged cumulative tower count on 17 July of 97,602.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 440% and 440% respectively (Table 17). When the comparison was restricted to travel time analysis only (27 June - 14 July), accuracy and bias improved to 37% and 36% respectively.

### Kvichak River

Test fishing began 21 June and ended 16 July. A total of 3,709 sockeye salmon were caught, producing 25,041 index points (Table 18, Appendix E.1.). Test fish escapement estimates for 21 – 28 June were based on the 1985-97 mean EPI value of 81 (Table 18, Appendix F.1.). Sufficient spawning escapement data were collected by 29 June to allow estimation of EPI values based on travel time (Table 18). Estimated travel times during the season ranged from 1 to 3 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 91 (Appendix F.1.).

Daily escapement estimates based on the 1985-97 mean EPI (22 – 28 June) ranged from 26% less to 440% greater than visual counts from towers, assuming actual travel time was 2 d (Table 18). Daily escapement estimates based on travel time analysis (29 June to 16 July) ranged from 30% less to 6% greater than tower counts (Table 18, Figure 18). The travel time analysis estimate of 2,278,731 sockeye salmon on 16 July was 1% less than the lagged cumulative tower count (18 July) of 2,290,584.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 52% and 31% respectively (Table 18). When the comparison was restricted to travel time analysis only (29 June - 16 July) accuracy and bias improved to 13% and -11% respectively.

### Egegik River

Test fishing began 14 June and ended 13 July. A total of 2,917 sockeye salmon were caught producing a cumulative index of 16,476 (Table 19, Appendix E.2.). Test fish escapement estimates for 14 to 23 June were based on the 1985-97 mean EPI value of 72 (Table 19, Appendix F.2.). Sufficient spawning escapement data were collected by 24 June to allow estimation of EPI values based on travel time (Table 19). Estimated travel times during this period ranged from 2 to 4 d. On the last day of project operation, the best estimate of travel time was 3 d and the EPI was 65 (Appendix F.2.).

Daily escapement estimates based on the 1985-97 mean EPI (15 - 23 June) ranged from 111% to 136,100% greater than visual counts from towers, assuming actual travel time was 3 d (Table 19). Daily escapement estimates based on travel time analysis (24 June to 13 July) ranged from 31% less to 33% greater than tower counts (Table 19, Figure 19). The travel time analysis estimate of 1,070,940 sockeye salmon on 13 July was 4% greater than the lagged cumulative tower count on 16 July of 1,032,480.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 5,682% and 5,672% respectively (Table 19). When the comparison was restricted to travel time analysis only (24 June to 13 July), accuracy and bias improved to 12% and -2% respectively.

### **Ugashik River**

Test fishing began 26 June and ended 18 July. A total of 1,480 sockeye salmon were caught producing a cumulative index of 8,243 (Table 20, Appendix E.3.). Test fish escapement estimates for 26 June to 6 July were based on the 1985-97 mean EPI value of 54 (Table 20, Appendix F.3.). Sufficient spawning escapement data were collected by 7 July to allow estimation of EPI values based on travel time (Table 20). Estimated travel times during this period ranged from 1 to 2 d. On the last day of project operation, the estimate of travel time was 2 d and the EPI was 71 (Appendix F.3.).

Daily escapement estimates based on the 1985-97 mean EPI (30 June - 6 July) ranged from 27% less to 11,675% greater than visual counts from towers, assuming actual travel time was 2 d (Table 20). Daily escapement estimates based on travel time analysis (7 - 18 July) ranged from 40% less to 9% greater than tower counts (Table 20, Figure 20). The travel time analysis estimate of 585,253 sockeye salmon on 18 July was 1% less than the lagged cumulative tower count on 20 July of 589,920.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 687% and 666% respectively (Table 20). When the comparison was restricted to travel time analysis only (7 - 18 July), accuracy and bias improved to 16% and -13% respectively.

### **Igushik River**

Test fishing began 16 June and ended 12 July. A total of 2,310 sockeye salmon were caught producing a cumulative index of 9,080 (Table 21, Appendix E.4.). Test fish escapement estimates for 16 June to 1 July were based on the 1988-92, 94-97 mean EPI value of 61 (Table 21, Appendix F.4.). Sufficient spawning escapement data were collected by 2 July to allow estimation of EPI values based on travel time (Table 21). Estimated travel times during this period ranged from 2 - 5 d. On the last day of project operation, the best estimate of travel time was 2 d and the EPI was 19 (Appendix F.4.).

Daily escapement estimates based on the historic mean EPI (27 June to 1 July) ranged from 256% to 1,361% greater than visual counts from towers, assuming actual travel time was 2 d (Table 21). Daily escapement estimates based on travel time analysis (2 - 12 July) ranged from

13% less to 138% greater than tower counts (Table 21, Figure 21). The travel time analysis estimate of 172,520 sockeye salmon on 12 July was 7% less than the lagged cumulative tower count on 14 July of 186,372.

Accuracy (MAPE) and bias (MPE) for all test fish escapement estimates compared to lagged tower counts was 209% and 200% respectively (Table 21). When the comparison was restricted to travel time analysis only (2 – 12 July), accuracy and bias improved to 43% and 31% respectively.

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Table 1. Locations (GPS coordinates) of Bristol Bay sockeye salmon test-fishing sites.

River	Test - Fishing Site	River Bank	GPS Coordinates <sup>1</sup>
Kvichak River	1	West	N 59° 01' 16.3", W 156° 52' 34.4"
	2	East	N 59° 03' 25.3", W 156° 51' 10.0"
Egegik River	1	South	N 58° 12.04', W 157° 10.00'
	2	North	N 58° 11.97', W 157° 11.00'
Ugashik River	1	East	N 57° 33.262', W 157° 25.010'
	2	West	N 57° 33.419', W 157° 25.848'
Igushik River	1	South	N 58° 49.51', W 159° 02.36'
	2	North	N 58° 49.48', W 159° 02.36'

<sup>1</sup> GPS coordinates are generally considered to be accurate within 300 ft.



Table 2. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Kvichak River, 1994.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/22	8.4	0	0	0	108	0	6/24	66	
6/23	70.7	0	0	0	108	0	6/25	144	
6/24	64.9	1	3	3	108	353	6/26	882	-60
6/25	61.3	44	211	214	108	23,108	6/27	7,626	203
6/26	67.7	4	16	230	108	24,791	6/28	23,880	4
6/27	65.8	0	0	230	108	24,791	6/29	24,642	1
6/28	63.0	1	4	233	108	25,181	6/30	24,948	1
6/29	55.8	22	158	391	108	42,242	7/01	25,452	66
6/30	50.0	23	228	619	108	66,868	7/02	29,082	130
7/01	35.3	50	792	1,411	109	153,845	7/03	253,290	-39
7/02	2.6	116	10,708	12,119	108	1,308,897	7/04	1,549,182	-16
7/03	4.8	182	9,908	22,027	108	2,378,928	7/05	2,726,022	-13
7/04	19.0	172	3,438	25,465	129	3,285,039	7/06	3,516,918	-7
7/05	6.4	96	4,843	30,308	116	3,515,760	7/07	4,271,604	-18
7/06	5.8	122	5,165	35,473	128	4,540,605	7/08	5,130,840	-12
7/07	18.9	45	1,312	36,785	141	5,186,734	7/09	5,820,486	-11
7/08	5.5	137	6,258	43,044	145	6,241,347	7/10	6,473,112	-4
7/09	5.7	115	5,042	48,086	137	6,587,722	7/11	7,057,722	-7
7/10	20.7	80	2,038	50,123	143	7,167,636	7/12	7,267,536	-1
7/11	29.1	47	781	50,904	144	7,330,224	7/13	7,329,930	0
7/12	32.8	75	755	51,659	144	7,438,932	7/14	7,382,004	1
7/13	25.1	73	973	52,632	143	7,526,410	7/15	7,495,488	0
7/14	35.6	46	322	52,954	143	7,572,442	7/16	7,540,152	0
7/15	12.2	97	2,119	55,073	142	7,820,436	7/17	7,631,076	2
6/22 - 7/15									
Mean Percent Error (MPE)									9
Mean Absolute Percent Error (MAPE)									33
7/1 - 7/15									
Mean Percent Error (MPE)									-8
Mean Absolute Percent Error (MAPE)									9

<sup>1</sup> The 1985-93 mean escapement per index point relationship (108 EPI) was used until July 1 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at the end of the season was 2 d.

Table 3. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Egegik River, 1994.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/15	54.7	12	47	47	73	3,431	6/17	<sup>3</sup>	
6/16	61.8	6	23	70	73	5,110	6/18	<sup>3</sup>	
6/17	54.7	30	136	206	73	15,038	6/19	<sup>3</sup>	
6/18	48.6	16	79	285	73	20,805	6/20	<sup>3</sup>	
6/19	48.2	15	68	353	73	25,769	6/21	<sup>3</sup>	
6/20	50.6	28	136	489	73	35,697	6/22	816	4,275
6/21	30.6	44	341	830	73	60,590	6/23	1,080	5,510
6/22	62.8	83	326	1,156	73	84,388	6/24	6,018	1,302
6/23	63.2	72	175	1,331	73	97,163	6/25	38,070	155
6/24	53.6	10	45	1,376	73	100,448	6/26	109,248	-8
6/25	56.2	83	634	2,010	73	146,730	6/27	126,612	16
6/26	57.0	10	45	2,055	82	168,510	6/28	137,502	23
6/27	56.3	103	532	2,587	95	245,765	6/29	143,214	72
6/28	50.7	15	71	2,658	68	180,744	6/30	178,302	1
6/29	59.5	39	156	2,814	71	199,794	7/1	209,712	-5
6/30	45.4	159	891	3,705	68	251,940	7/2	214,290	18
7/1	60.1	10	39	3,744	81	303,264	7/3	243,810	24
7/2	62.3	58	239	3,983	76	302,708	7/4	465,636	-35
7/3	28.7	118	1,573	5,556	86	477,816	7/5	650,400	-27
7/4	27.5	25	200	5,756	116	667,696	7/6	829,218	-19
7/5	9.2	77	2,048	7,804	112	874,048	7/7	1,009,356	-13
7/6	20.1	60	881	8,685	106	920,610	7/8	1,160,532	-21
7/7	20.1	71	974	9,659	119	1,149,421	7/9	1,337,424	-14
7/8	35.7	18	129	9,788	126	1,233,288	7/10	1,416,828	-13
7/9	23.8	81	848	10,636	142	1,510,312	7/11	1,523,220	-1
7/10	21.4	85	1,105	11,741	147	1,725,927	7/12	1,623,228	6
7/11	27.3	20	179	11,920	138	1,644,960	7/13	1,665,576	-1
7/12	20.3	62	857	12,777	137	1,750,449	7/14	1,708,998	2
6/20 - 7/12						Mean Percent Error(MPE)	489		
						Mean Absolute Percent Error(MAPE)	503		
6/26 - 7/12						Mean Percent Error(MPE)	0		
						Mean Absolute Percent Error(MAPE)	17		

<sup>1</sup> The 1985-93 mean escapement per index point relationship (73 EPI) was used until June 26 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 4. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Ugashik River, 1994.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/25	121.3	8	15	15	53	795	6/26	<sup>3</sup>	
6/26	109.1	10	22	37	53	1,961	6/27	<sup>3</sup>	
6/27	79.3	5	14	51	53	2,703	6/28	<sup>3</sup>	
6/28	117.1	9	20	71	53	3,763	6/29	<sup>3</sup>	
6/29	110.9	3	6	77	53	4,081	6/30	<sup>3</sup>	
6/30	100.7	6	14	91	53	4,823	7/1	<sup>3</sup>	
7/1	104.6	6	14	105	53	5,565	7/2	<sup>3</sup>	
7/2	101.0	9	21	126	53	6,678	7/3	228	2,829
7/3	106.0	5	13	139	53	7,367	7/4	708	941
7/4	48.1	0	0	139	53	7,367	7/5	960	667
7/5	101.6	3	8	147	53	7,791	7/6	1,440	441
7/6	48.9	1	5	152	53	8,056	7/7	1,698	374
7/7	101.1	24	71	223	53	11,819	7/8	1,818	550
7/8	83.2	57	165	388	53	20,564	7/9	6,648	209
7/9	40.0	196	1,322	1,710	53	90,630	7/10	108,618	-17
7/10	21.6	139	1,545	3,255	90	292,950	7/11	313,296	-6
7/11	24.5	120	1,229	4,484	90	403,560	7/12	520,500	-22
7/12	29.9	82	656	5,140	137	704,180	7/13	570,576	23
7/13	29.0	97	830	5,970	119	710,430	7/14	594,738	19
7/14	34.4	54	376	6,346	99	628,254	7/15	626,022	0
7/15	22.5	65	1,020	7,366	98	721,868	7/16	689,166	5
7/16	26.0	39	357	7,723	93	718,239	7/17	727,656	-1
7/17	20.0	36	457	8,180	94	768,920	7/18	766,638	0
7/2 - 7/17						Mean Percent Error(MPE)			376
						Mean Absolute Percent Error(MAPE)			382
7/10 - 7/17						Mean Percent Error(MPE)			2
						Mean Absolute Percent Error(MAPE)			10

<sup>1</sup> The 1985-93 mean escapement per index point relationship (53 EPI) was used until July 10 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 1 d.

<sup>3</sup> Observation towers not in operation.

Table 5. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Igushik River, 1994.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/17	63.2	0	0	0	187	-	6/19	<sup>3</sup>	
6/18	127.6	1	2	2	187	374	6/20	<sup>3</sup>	
6/19	61.4	0	0	2	187	374	6/21	<sup>3</sup>	
6/20	125.8	0	0	2	187	374	6/22	54	593
6/21	127.5	6	11	13	187	2,431	6/23	288	744
6/22	124.4	0	0	13	187	2,431	6/24	414	487
6/23	124.4	0	0	13	187	2,431	6/25	870	179
6/24	116.7	2	4	17	187	3,179	6/26	1,788	78
6/25	123.0	3	6	23	187	4,301	6/27	2,694	60
6/26	124.4	1	2	25	143	3,575	6/28	5,394	-34
6/27	123.2	5	10	35	215	7,525	6/29	8,388	-10
6/28	126.6	0	0	35	424	14,840	6/30	10,122	47
6/29	123.3	0	0	35	664	23,240	7/1	11,958	94
6/30	125.1	1	2	37	454	16,798	7/2	16,740	0
7/1	124.0	18	35	72	730	52,560	7/3	19,782	166
7/2	52.1	35	279	351	497	174,447	7/4	32,694	434
7/3	123.3	24	47	398	587	233,626	7/5	48,246	384
7/4	123.8	20	38	436	535	233,260	7/6	59,556	292
7/5	123.7	7	14	450	684	307,800	7/7	73,242	320
7/6	124.3	2	4	454	513	232,902	7/8	79,440	193
7/7	123.5	4	8	462	236	109,032	7/9	87,924	24
7/8	112.6	57	197	659	350	230,650	7/10	109,122	111
7/9	71.8	161	1,101	1,760	194	341,440	7/11	161,046	112
7/10	94.5	128	385	2,145	166	356,070	7/12	206,910	72
7/11	134.5	61	125	2,270	115	261,050	7/13	246,438	6
7/12	125.9	26	50	2,320	106	245,920	7/14	284,670	-14
7/13	125.2	12	23	2,343	108	253,044	7/15	301,446	-16
6/20 - 7/13						Mean Percent Error(MPE)	180		
						Mean Absolute Percent Error(MAPE)	186		
6/26 - 7/13						Mean Percent Error(MPE)	121		
						Mean Absolute Percent Error(MAPE)	129		

<sup>1</sup> The 1988-89, 1991-93 mean escapement per index point relationship(187 EPI) was used until June 26 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 6. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Kvichak River, 1995.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/21	76.8	0	0	0	111	0	6/23	0	
6/22	38.3	0	0	0	111	0	6/24	0	
6/23	73.2	1	4	4	111	444	6/25	60	640
6/24	68.8	2	7	11	111	1,221	6/26	41,406	-97
6/25	32.0	145	3,236	3,247	111	360,417	6/27	361,350	0
6/26	7.5	157	5,392	8,639	111	958,929	6/28	724,302	32
6/27	25.0	62	970	9,609	111	1,066,599	6/29	941,466	13
6/28	33.6	6	42	9,651	111	1,071,261 <sup>1</sup>	6/30	1,113,768	-4
6/29	13.6	173	3,826	13,477	111	1,495,947	7/01	1,610,586	-7
6/30	5.1	102	5,645	19,122	115	2,199,030	7/02	2,338,470	-6
7/01	30.4	101	1,260	20,382	119	2,425,458	7/03	2,797,974	-13
7/02	29.6	95	2,071	22,453	122	2,739,266	7/04	3,105,426	-12
7/03	27.8	60	1,068	23,521	136	3,198,856	7/05	3,346,434	-4
7/04	15.8	206	4,292	27,813	138	3,838,194	7/06	3,983,466	-4
7/05	11.1	229	8,061	35,874	142	5,094,108	7/07	4,937,724	3
7/06	18.9	232	4,662	40,536	143	5,796,648	7/08	5,930,604	-2
7/07	14.0	200	6,474	47,010	137	6,440,370	7/09	7,020,624	-8
7/08	13.6	132	3,016	50,026	146	7,303,796	7/10	7,683,972	-5
7/09	30.1	94	955	50,981	149	7,596,169	7/11	8,006,076	-5
7/10	35.1	117	795	51,776	152	7,869,952	7/12	8,169,732	-4
7/11	32.6	168	1,282	53,058	158	8,383,164	7/13	8,430,660	-1
7/12	32.6	183	1,372	54,430	155	8,436,650	7/14	8,658,360	-3
7/13	24.2	202	3,000	57,430	157	9,016,510	7/15	8,878,692	2
7/14	29.4	94	806	58,236	155	9,026,580	7/16	9,017,946	0
7/15	30.3	66	521	58,757	153	8,989,821	7/17	9,131,418	-2
7/16	28.8	98	821	59,578	154	9,175,012	7/18	9,247,914	-1
7/17	30.8	171	1,342	60,920	154	9,381,680	7/19	9,511,962	-1
7/18	25.3	145	1,636	62,556	154	9,633,624	7/20	9,702,972	-1
6/23 - 7/18						Mean Percent Error (MPE)			20
						Mean Absolute Percent Error (MAPE)			33
6/30 - 7/18						Mean Percent Error (MPE)			-3
						Mean Absolute Percent Error (MAPE)			4

<sup>1</sup> The 1985-94 mean escapement per index point relationship (111 EPI) was used until June 30 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at the end of the season was 2 d.

Table 7. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Egegik River, 1995.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/16	60.1	9	35	35	79	2,765	6/18	<sup>3</sup>	
6/17	58.6	68	339	374	79	29,546	6/19	456	6,379
6/18	54.4	53	236	610	79	48,190	6/20	5,142	837
6/19	58.5	55	210	820	79	64,780	6/21	20,658	214
6/20	63.5	61	241	1,061	79	83,819	6/22	22,710	269
6/21	56.5	86	428	1,489	79	117,631	6/23	22,788	416
6/22	60.9	40	158	1,647	79	130,113	6/24	26,388	393
6/23	29.3	47	372	2,019	79	159,501	6/25	54,864	191
6/24	66.3	89	282	2,301	79	181,779	6/26	136,548	33
6/25	45.7	100	798	3,099	79	244,821	6/27	224,874	9
6/26	40.4	165	1,087	4,186	36	150,696	6/28	413,640	-64
6/27	23.0	83	1,036	5,222	70	365,540	6/29	529,458	-31
6/28	30.4	194	1,516	6,738	89	599,682	6/30	651,534	-8
6/29	34.6	29	193	6,931	101	700,031	7/1	731,520	-4
6/30	28.1	107	937	7,868	96	755,328	7/2	738,414	2
7/1	29.3	27	199	8,067	105	847,035	7/3	756,942	12
7/2	26.2	5	54	8,121	93	755,253	7/4	835,848	-10
7/3	28.6	37	322	8,443	93	785,199	7/5	891,984	-12
7/4	21.1	82	1,006	9,449	102	963,798	7/6	933,210	3
7/5	26.7	6	57	9,506	107	1,017,142	7/7	936,186	9
7/6	24.3	7	76	9,582	98	939,036	7/8	1,001,562	-6
7/7	33.8	32	347	9,929	98	973,042	7/9	1,063,380	-8
7/8	29.2	59	602	10,531	102	1,074,162	7/10	1,068,600	1
7/9	25.4	23	215	10,746	102	1,096,092	7/11	1,092,234	0
7/10	10.0	2	49	10,795	101	1,090,295	7/12	1,113,714	-2
7/11	27.0	43	562	11,357	101	1,147,057	7/13	1,128,558	2
7/12	24.8	32	412	11,769	100	1,176,900	7/14	1,139,724	3
6/17 - 7/12						Mean Percent Error(MPE)			332
						Mean Absolute Percent Error(MAPE)			343
6/26 - 7/12						Mean Percent Error(MPE)			-7
						Mean Absolute Percent Error(MAPE)			10

<sup>1</sup> The 1985-94 mean escapement per index point relationship (79 EPI) was used until June 26 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 8. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Ugashik River, 1995.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/24	58.7	2	8	8	80	640	6/27	<sup>3</sup>	
6/25	123	2	4	12	80	960	6/28	<sup>3</sup>	
6/26	121.3	2	4	16	80	1,280	6/29	<sup>3</sup>	
6/27	108.7	1	2	18	80	1,440	6/30	<sup>3</sup>	
6/28	92.5	2	5	23	80	1,840	7/1	<sup>3</sup>	
6/29	101.8	12	28	51	80	4,080	7/2	<sup>3</sup>	
6/30	117.4	30	62	113	80	9,040	7/3~	3,078	194
7/1	101.9	78	185	298	80	23,840	7/4	7,722	209
7/2	107.4	101	227	525	80	42,000	7/5	11,532	264
7/3	115.0	87	182	707	80	56,560	7/6	33,570	68
7/4	121.0	134	284	991	80	79,280	7/7	89,376	-11
7/5	81.4	138	568	1,559	80	124,720	7/8	131,052	-5
7/6	76.8	147	471	2,030	80	162,400	7/9	143,340	13
7/7	86.9	65	197	2,227	74	164,798	7/10	155,004	6
7/8	104.6	51	126	2,353	84	197,652	7/11	166,362	19
7/9	47.0	41	208	2,561	81	207,441	7/12	184,350	13
7/10	50.7	139	722	3,283	74	242,942	7/13	194,118	25
7/11	56.9	87	371	3,654	70	255,780	7/14	201,930	27
7/12	79.0	63	197	3,851	70	269,570	7/15	207,780	30
7/13	82.4	49	144	3,995	68	271,660	7/16	231,720	17
7/14	79.1	63	195	4,190	58	243,020	7/17	277,626	-12
7/15	49.7	93	633	4,823	53	255,619	7/18	556,164	-54
7/16	14.1	125	2,343	7,166	58	415,628	7/19	914,160	-55
7/17	13.5	137	2,443	9,609	66	634,194	7/20	1,136,262	-44
7/18	16.4	218	4,169	13,778	77	1,060,906	7/21	1,227,120	-14
7/19	13.6	112	2,055	15,833	81	1,282,473	7/22	1,249,398	3
6/30 - 7/17						Mean Percent Error(MPE)			39
						Mean Absolute Percent Error(MAPE)			59
7/7 - 7/17						Mean Percent Error(MPE)			-3
						Mean Absolute Percent Error(MAPE)			27

<sup>1</sup> The 1985-94 mean escapement per index point relationship (80 EPI) was used until July 7 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 3 d.

<sup>3</sup> Observation towers not in operation.

Table 9. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Igushik River, 1995.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/18	61.2	0	0	0	87	-	6/20	<sup>3</sup>	
6/19	85.8	1	3	3	87	261	6/21	<sup>3</sup>	
6/20	122.4	1	2	5	87	435	6/22	<sup>3</sup>	
6/21	123.4	1	2	7	87	609	6/23	306	99
6/22	123.0	0	0	7	87	609	6/24	864	-30
6/23	61.3	1	4	11	87	957	6/25	3,186	-70
6/24	122.6	15	29	40	87	3,480	6/26	9,246	-62
6/25	123.2	139	267	307	87	26,709	6/27	36,600	-27
6/26	112.0	32	163	470	87	40,890	6/28	66,084	-38
6/27	116.0	49	132	602	87	52,374	6/29	93,006	-44
6/28	98.3	53	568	1,170	140	163,800	6/30	134,718	22
6/29	100.7	181	1,022	2,192	154	337,568	7/1	173,310	95
6/30	103.6	71	327	2,519	115	289,685	7/2	224,910	29
7/1	124.0	46	90	2,609	114	297,426	7/3	249,882	19
7/2	123.6	11	21	2,630	102	268,260	7/4	261,930	2
7/3	123.6	15	29	2,659	95	252,605	7/5	271,734	-7
7/4	125.2	9	17	2,676	99	264,924	7/6	278,694	-5
7/5	123.2	12	24	2,700	103	278,100	7/7	285,288	-3
7/6	123.3	63	122	2,822	104	293,488	7/8	298,230	-2
7/7	93.5	172	729	3,551	105	372,855	7/9	323,112	15
7/8	61.5	15	58	3,609	105	378,945	7/10	349,110	9
6/21 - 7/8						Mean Percent Error(MPE)			0
						Mean Absolute Percent Error(MAPE)			32
6/28 - 7/8						Mean Percent Error(MPE)			16
						Mean Absolute Percent Error(MAPE)			19

<sup>1</sup> The 1991, 92, 94 mean escapement per index point relationship (87 EPI) was used until June 28 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.



Table 10. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Kvichak River, 1996.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/21	53.9	0	0	0	93	0	6/23	0	
6/22	71.7	1	3	3	93	279	6/24	42	564
6/23	72.3	2	6	9	93	837	6/25	4,104	-80
6/24	67.0	35	132	141	93	13,113	6/26	25,278	-48
6/25	73.0	6	19	160	93	14,880	6/27	36,588	-59
6/26	33.3	2	15	175	93	16,275	6/28	39,954	-59
6/27	64.8	0	0	175	93	16,275	6/29	40,956	-60
6/28	62.9	0	0	175	228	39,900	6/30	41,730	-4
6/29	56.9	1	4	179	234	41,886	7/01	47,304	-11
6/30	64.9	30	107	286	238	68,068	7/02	90,198	-25
7/01	47.2	61	430	716	264	189,024	7/03	224,100	-16
7/02	51.2	218	1,058	1,774	125	221,750	7/04	317,832	-30
7/03	46.3	119	647	2,421	230	556,830	7/05	361,242	54
7/04	56.7	34	131	2,552	175	446,600	7/06	384,966	16
7/05	58.4	26	101	2,653	175	464,275	7/07	419,982	11
7/06	56.1	48	214	2,867	154	441,518	7/08	468,372	-6
7/07	34.8	195	1,520	4,387	146	640,502	7/09	568,224	13
7/08	33.6	135	1,009	5,396	112	604,352	7/10	668,742	-10
7/09	15.8	112	1,581	6,977	108	753,516	7/11	769,008	-2
7/10	21.9	139	1,849	8,826	105	926,730	7/12	859,962	8
7/11	20.3	139	1,859	10,685	93	993,705	7/13	1,035,414	-4
7/12	29.9	200	1,626	12,311	80	984,880	7/14	1,159,806	-15
7/13	27.1	115	1,028	13,339	83	1,107,137	7/15	1,237,662	-11
7/14	22.6	161	2,745	16,084	83	1,334,972	7/16	1,309,980	2
7/15	20.3	121	1,342	17,426	82	1,428,932	7/17	1,332,114	7
7/16	32.6	49	366	17,792	80	1,423,360	7/18	1,352,754	5
7/17	33.3	56	297	18,089	77	1,392,853	7/19	1,396,710	0
6/22 - 7/17						Mean Percent Error (MPE)			9
						Mean Absolute Percent Error (MAPE)			43
6/28 - 7/17						Mean Percent Error (MPE)			-1
						Mean Absolute Percent Error (MAPE)			12

<sup>1</sup> The 1985-95 mean escapement per index point relationship (93 EPI) was used until June 28 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at the end of the season was 2 d.

Table 11. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Egegik River, 1996.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/15	66.9	83	326	326	80	26,080	6/16	<sup>3</sup>	
6/16	44.2	72	390	716	80	57,280	6/17	<sup>3</sup>	
6/17	59.7	95	464	1,180	80	94,400	6/19	11,220	741
6/18	58.9	29	144	1,324	80	105,920	6/20	21,870	384
6/19	27.6	4	32	1,356	80	108,480	6/21	21,960	394
6/20	55.3	11	66	1,422	80	113,760	6/22	23,220	390
6/21	59.6	4	19	1,441	80	115,280	6/23	44,394	160
6/22	56.4	45	202	1,643	80	131,440	6/24	71,772	83
6/23	24.8	164	1,962	3,605	80	288,400	6/25	96,240	200
6/24	56.1	33	153	3,758	45	169,110	6/26	98,538	72
6/25	54.7	99	647	4,405	50	220,250	6/27	99,426	122
6/26	61.6	18	70	4,475	44	196,900	6/28	136,602	44
6/27	49.3	20	95	4,570	30	137,100	6/29	172,470	-21
6/28	46.4	156	1,091	5,661	30	169,830	6/30	206,904	-18
6/29	20.5	74	1,004	6,665	41	273,265	7/1	243,126	12
6/30	47.3	86	567	7,232	40	289,280	7/2	289,164	0
7/1	39.9	94	647	7,879	39	307,281	7/3	349,878	-12
7/2	49.0	117	819	8,698	42	365,316	7/4	380,994	-4
7/3	48.2	58	366	9,064	44	398,816	7/5	398,196	0
7/4	56.3	58	243	9,307	46	428,122	7/6	406,800	5
7/5	53.0	27	157	9,464	48	454,272	7/7	441,486	3
7/6	61.6	59	236	9,700	46	446,200	7/8	492,828	-9
7/7	50.8	140	726	10,426	48	500,448	7/9	555,078	-10
7/8	50.5	152	1,011	11,437	50	571,850	7/10	789,726	-28
7/9	51.5	148	853	12,290	53	651,370	7/11	1,015,800	-36
7/10	26.6	162	1,918	14,208	64	909,312	7/12	1,036,488	-12
7/11	40.8	87	714	14,922	71	1,059,462	7/13	1,038,858	2
7/12	39.5	20	121	15,043	72	1,083,096	7/14	1,042,128	4
6/17 - 7/12						Mean Percent Error(MPE)	98		
						Mean Absolute Percent Error(MAPE)	110		
6/24 - 7/12						Mean Percent Error(MPE)	6		
						Mean Absolute Percent Error(MAPE)	23		

<sup>1</sup> The 1985-95 mean escapement per index point relationship (80 EPI) was used until June 24 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 12. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Ugashik River, 1996.

Test Fishing							Observation Tower		Percent Error of Test Fishing Estimate
Date	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/23	56.5	7	29	29	95	2,755	6/25	<sup>3</sup>	
6/24	102.9	8	20	49	95	4,655	6/26	<sup>3</sup>	
6/25	110.9	8	17	66	95	6,270	6/27	<sup>3</sup>	
6/26	63.3	6	23	89	95	8,455	6/28	<sup>3</sup>	
6/27	122.3	11	21	110	95	10,450	6/29	<sup>3</sup>	
6/28	109.5	4	9	119	95	11,305	6/30	<sup>3</sup>	
6/29	102.3	10	23	142	95	13,490	- 7/1	<sup>3</sup>	
6/30	100.0	22	54	196	95	18,620	7/2	<sup>3</sup>	
7/1	90.3	87	243	439	95	41,705	7/3	5,604	644
7/2	34.5	171	1,167	1,606	95	152,570	7/4	34,470	343
7/3	17.6	181	2,584	4,190	95	398,050	7/5	97,626	308
7/4	17.2	163	2,406	6,596	95	626,620	7/6	194,946	221
7/5	22.5	135	1,669	8,265	41	338,865	7/7	245,946	38
7/6	88.3	129	386	8,651	40	346,040	7/8	282,606	22
7/7	76.6	163	562	9,213	40	368,520	7/9	296,118	24
7/8	59.3	94	458	9,671	40	386,840	7/10	302,952	28
7/9	89.4	44	125	9,796	39	382,044	7/11	311,322	23
7/10	98.3	67	165	9,961	35	348,635	7/12	317,994	10
7/11	37.9	46	290	10,251	34	348,534	7/13	323,286	8
7/12	83.6	57	188	10,439	33	344,487	7/14	328,962	5
7/13	97.3	41	108	10,547	32	337,504	7/15	338,568	0
7/14	99.9	55	136	10,683	33	352,539	7/16	396,222	-11
7/15	29.8	159	1,992	12,675	33	418,275	7/17	484,836	-14
7/16	9.2	130	3,393	16,068	37	594,516	7/18	551,766	8
7/17	12.9	88	1,814	17,882	38	679,516	7/19	585,210	16
7/18	18.8	59	735	18,617	36	670,212	7/20	610,926	10
7/1 - 7/18						Mean Percent Error(MPE)	93		
						Mean Absolute Percent Error(MAPE)	96		
7/5 - 7/18						Mean Percent Error(MPE)	12		
						Mean Absolute Percent Error(MAPE)	15		

<sup>1</sup> The 1985-95 mean escapement per index point relationship (95 EPI) was used until July 5 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 13. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Igushik River, 1996.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/15	63.5	0	0	0	92	-	6/18	<sup>3</sup>	
6/16	123.5	8	16	16	92	1,472	6/19	<sup>3</sup>	
6/17	123.8	17	33	49	92	4,508	6/20	<sup>3</sup>	
6/18	128.1	1	2	51	92	4,692	6/21	<sup>3</sup>	
6/19	122.6	4	8	59	92	5,428	6/22	<sup>3</sup>	
6/20	127.1	3	6	65	92	5,980	6/23	<sup>3</sup>	
6/21	123	1	2	67	92	6,164	6/24	3,546	74
6/22	124.8	0	0	67	92	6,164	6/25	8,712	-29
6/23	124.1	10	19	86	92	7,912	6/26	23,664	-67
6/24	103	118	511	597	92	54,924	6/27	36,054	52
6/25	64.5	64	470	1,067	92	98,164	6/28	56,988	72
6/26	122.6	19	37	1,104	92	101,568	6/29	68,034	49
6/27	60.7	8	32	1,136	92	104,512	6/30	72,894	43
6/28	138.0	6	10	1,146	53	60,738	7/1	76,932	-21
6/29	60.9	0	0	1,146	61	69,906	7/2	79,656	-12
6/30	122.5	30	59	1,205	64	77,120	7/3	82,908	-7
7/1	120.4	36	84	1,289	67	86,363	7/4	87,114	-1
7/2	123.4	32	62	1,351	69	93,219	7/5	91,680	2
7/3	113.9	56	122	1,473	68	100,164	7/6	99,312	1
7/4	123.0	46	192	1,665	67	111,555	7/7	107,196	4
7/5	124.6	38	74	1,739	67	116,513	7/8	119,112	-2
7/6	116.5	56	178	1,917	67	128,439	7/9	132,882	-3
7/7	110.1	107	278	2,195	64	140,480	7/10	150,096	-6
7/8	124.9	69	133	2,328	68	158,304	7/11	173,790	-9
7/9	88.2	235	956	3,284	69	226,596	7/12	206,598	10
7/10 <sup>4</sup>			787	4,071	68	276,828	7/13	246,642	12
7/11	44.5	91	617	4,688	74	346,912	7/14	278,724	24
7/12	51.9	48	607	5,295	62	328,290	7/15	300,222	9
6/21 - 7/12						Mean Percent Error(MPE)			9
						Mean Absolute Percent Error(MAPE)			23
6/28 - 7/12						Mean Percent Error(MPE)			0
						Mean Absolute Percent Error(MAPE)			8

<sup>1</sup> The 1991, 92, 94, 95 mean escapement per index point relationship (92 EPI) was used until June 28 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 3 d.

<sup>3</sup> Observation towers not in operation.

<sup>4</sup> No test fishing conducted due to weather. Daily index was interpolated using data from July 9 and 11.

Table 14. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Kvichak River, 1997.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/21	48.9	0	0	0	84	0	6/23	<sup>3</sup>	
6/22	87.1	4	10	10	84	840	6/24	2,676	-69
6/23	86.4	4	10	20	84	1,680	6/25	6,300	-73
6/24	86.7	7	19	39	84	3,276	6/26	15,108	-78
6/25	88.1	12	32	71	84	5,964	6/27	41,760	-86
6/26	90.2	9	23	94	84	7,896	6/28	59,904	-87
6/27	85.6	11	33	127	84	10,668	6/29	66,636	-84
6/28	77.7	4	15	142	84	11,928	6/30	72,720	-84
6/29	68.3	7	26	168	84	14,112	7/01	75,894	-81
6/30	67.2	21	73	241	84	20,244	7/02	82,920	-76
7/01	78.2	35	111	352	84	29,568	7/03	115,974	-75
7/02	33.8	105	739	1,091	84	91,644	7/04	157,986	-42
7/03	51.8	195	1,004	2,095	99	207,405	7/05	206,040	-15
7/04	42.3	227	1,304	3,399	109	370,491	7/06	299,526	24
7/05	28.1	228	1,913	5,312	79	419,648	7/07	439,404	-4
7/06	21.0	327	4,213	9,525	61	581,025	7/08	637,146	-9
7/07	33.9	486	3,587	13,112	64	839,168	7/09	796,824	5
7/08	22.9	221	2,324	15,436	67	1,034,212	7/10	949,566	9
7/09	30.3	288	2,933	18,369	66	1,212,354	7/11	1,052,790	15
7/10	33.5	234	1,677	20,046	59	1,182,714	7/12	1,139,928	4
7/11	36.4	131	903	20,949	57	1,194,093	7/13	1,200,360	-1
7/12	35.8	156	1,056	22,005	56	1,232,280	7/14	1,291,050	-5
7/13	36.8	130	869	22,874	57	1,303,818	7/15	1,348,704	-3
7/14	33.5	83	600	23,474	58	1,361,492	7/16	1,381,290	-1
7/15	18.0	75	1,024	24,498	58	1,420,884	7/17	1,410,996	1
7/16	37.9	113	730	25,228	58	1,463,224	7/18	1,434,504	2
6/22 - 7/16						Mean Percent Error (MPE)			-32
						Mean Absolute Percent Error (MAPE)			37
7/3 - 7/16						Mean Percent Error (MPE)			2
						Mean Absolute Percent Error (MAPE)			6

<sup>1</sup> The 1985-96 mean escapement per index point relationship (84 EPI) was used until July 3 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at the end of the season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 15. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Egegik River, 1997.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/15	14.6	18	279	279	80	22,320	6/17	<sup>3</sup>	
6/16	34.9	78	498	777	80	62,160	6/18	<sup>3</sup>	
6/17	47.0	116	640	1,417	80	113,360	6/19	14,634	675
6/18	25.1	66	742	2,159	80	172,720	6/20	40,734	324
6/19	50.9	124	634	2,793	80	223,440	6/21	54,300	311
6/20	49.3	72	350	3,143	80	251,440	6/22	89,130	182
6/21	49.3	135	652	3,795	80	303,600	6/23	99,702	205
6/22	52.9	71	363	4,158	80	332,640	6/24	105,960	214
6/23	47.1	52	260	4,418	31	136,958	6/25	112,284	22
6/24	48.3	32	183	4,601	27	124,227	6/26	119,694	4
6/25	44.7	30	165	4,766	26	123,916	6/27	144,858	-14
6/26	52.0	36	171	4,937	27	133,299	6/28	187,494	-29
6/27	42.6	74	452	5,389	31	167,059	6/29	231,528	-28
6/28	48.9	79	422	5,811	40	232,440	6/30	266,094	-13
6/29	45.3	94	649	6,460	42	271,320	7/1	282,390	-4
6/30	47.0	89	514	6,974	42	292,908	7/2	289,008	1
7/1	53.9	23	103	7,077	45	318,465	7/3	302,622	5
7/2	23.4	66	775	7,852	43	337,636	7/4	310,578	9
7/3	55.1	89	454	8,306	42	348,852	7/5	319,830	9
7/4	51.9	74	378	8,684	40	347,360	7/6	338,082	3
7/5	50.2	107	875	9,559	38	363,242	7/7	508,746	-29
7/6	36.8	131	1,351	10,910	38	414,580	7/8	636,552	-35
7/7	33.2	380	3,853	14,763	49	723,387	7/9	675,780	7
7/8	44.6	163	968	15,731	49	770,819	7/10	688,032	12
7/9	52.8	178	921	16,652	43	716,036	7/11	864,228	-17
7/10	45.0	174	1,299	17,951	43	771,893	7/12	945,528	-18
7/11	47.0	223	1,486	19,437	50	971,850	7/13	1,013,658	-4
7/12	45.7	111	699	20,136	52	1,047,072	7/14	1,051,500	0
6/17 - 7/12						Mean Percent Error(MPE)	69		
						Mean Absolute Percent Error(MAPE)	84		
6/23 - 7/12						Mean Percent Error(MPE)	-6		
						Mean Absolute Percent Error(MAPE)	13		

<sup>1</sup> The 1985-96 mean escapement per index point relationship (80 EPI) was used until June 23 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 16. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Ugashik River, 1997.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/24	113.4	16	34	34	30	1,020	6/27	<sup>3</sup>	
6/25	112.3	12	27	61	30	1,830	6/28	<sup>3</sup>	
6/26	117.4	16	31	92	30	2,760	6/29	<sup>3</sup>	
6/27	112.9	22	51	143	30	4,290	6/30	<sup>3</sup>	
6/28	90.6	32	96	239	30	7,170	7/1	<sup>3</sup>	
6/29	90.5	19	51	290	30	8,700	7/2	210	4,043
6/30	84.7	47	135	425	30	12,750	7/3	1,500	750
7/1	41.4	15	89	514	30	15,420	7/4	2,976	418
7/2	84.3	25	72	586	30	17,580	7/5	4,680	276
7/3	94.0	20	51	637	30	19,110	7/6	7,050	171
7/4	95.3	28	71	708	30	21,240	7/7	16,338	30
7/5	81.9	38	112	820	30	24,600	7/8	29,838	-18
7/6	66.1	63	229	1,049	30	31,470	7/9	61,218	-49
7/7	27.7	121	1,358	2,407	44	105,908	7/10	95,448	11
7/8	20.7	127	1,686	4,093	36	147,348	7/11	143,538	3
7/9	21.2	157	1,794	5,887	33	194,271	7/12	192,594	1
7/10	21.7	131	1,480	7,367	31	228,377	7/13	229,674	-1
7/11	20.7	243	3,013	10,380	30	311,400	7/14	273,246	14
7/12	19.7	125	1,620	12,000	32	384,000	7/15	334,122	15
7/13	18.8	164	2,181	14,181	33	467,973	7/16	355,146	32
7/14	18.6	195	2,662	16,843	24	404,232	7/17	391,242	3
7/15	19.2	153	2,094	18,937	25	473,425	7/18	416,160	14
7/16	20.2	49	638	19,575	23	450,225	7/19	429,414	5
7/17	37.1	112	797	20,372	22	448,184	7/20	453,222	-1
7/18	12.9	75	1,597	21,969	22	483,318	7/21	481,356	0
6/29 - 7/18						Mean Percent Error(MPE)			286
						Mean Absolute Percent Error(MAPE)			293
7/7 - 7/18						Mean Percent Error(MPE)			8
						Mean Absolute Percent Error(MAPE)			8

<sup>1</sup> The 1985-96 mean escapement per index point relationship was 60 EPI. Low water levels and high water temperatures altered catchability and the initial fish per index value was lowered to 30 EPI. Lag-time relationships began to prove more accurate on July 7.

<sup>2</sup> Best travel time estimate at end of season was 3 d.

<sup>3</sup> Observation towers not in operation.

Table 17. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Igushik River, 1997.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/17	61.0	9	37	37	86	3,182	6/20	<sup>3</sup>	
6/18	121.0	10	19	56	86	4,816	6/21	<sup>3</sup>	
6/19	120.4	25	49	105	86	9,030	6/22	<sup>3</sup>	
6/20	116.3	28	55	160	86	13,760	6/23	474	2,803
6/21	121.7	79	150	310	86	26,660	6/24	1,278	1,986
6/22	129.5	63	112	422	86	36,292	6/25	2,250	1,513
6/23	119.8	58	108	530	86	45,580	6/26	2,988	1,425
6/24	113.7	49	105	635	86	54,610	6/27	4,860	1,024
6/25	84.7	67	189	824	86	70,864	6/28	7,224	881
6/26	112.7	51	105	929	86	79,894	6/29	9,864	710
6/27	113.2	47	94	1,023	11	11,253	6/30	11,490	-2
6/28	105.9	32	72	1,095	17	18,615	7/1	12,534	49
6/29	111.5	74	155	1,250	18	22,500	7/2	13,608	65
6/30	60.3	97	377	1,627	18	29,286	7/3	14,670	100
7/1	115.6	95	201	1,828	13	23,764	7/4	16,764	42
7/2	98.6	146	348	2,176	12	26,112	7/5	19,458	34
7/3	112.3	172	358	2,534	11	27,874	7/6	24,096	16
7/4	123.0	198	465	2,999	10	29,990	7/7	26,718	12
7/5	124.6	129	273	3,272	11	35,992	7/8	29,850	21
7/6	116.5	177	441	3,713	14	51,982	7/9	35,070	48
7/7	110.1	102	543	4,256	14	59,584	7/10	42,024	42
7/8	124.9	156	759	5,015	13	65,195	7/11	50,730	29
7/9	88.2	149	677	5,692	13	73,996	7/12	59,076	25
7/10	44.5	194	1,051	6,743	14	94,402	7/13	66,234	43
7/11	44.5	249	1,364	8,107	16	129,712	7/14	73,020	78
7/12	51.9	185	1,111	9,218	11	101,398	7/15	80,448	26
7/13	51.0	145	711	9,929	9	89,361	7/16	89,070	0
7/14	22.8	69	614	10,543	12	126,516	7/17	97,602	30
6/20 - 7/14						Mean Percent Error(MPE)	440		
						Mean Absolute Percent Error(MAPE)	440		
6/27 - 7/14						Mean Percent Error(MPE)	36		
						Mean Absolute Percent Error(MAPE)	37		

<sup>1</sup> The 1991, 92, 94-96 mean escapement per index point relationship (86 EPI) was used until June 27 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 3 d.

<sup>3</sup> Observation towers not in operation.



Table 18. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Kvichak River, 1998.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt.	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/21	75.5	1	4	4	81	324	6/23	<sup>3</sup>	
6/22	51.1	0	0	4	81	324	6/24	60	440
6/23	85.5	0	0	4	81	324	6/25	84	286
6/24	83.2	2	6	10	81	810	6/26	1,020	-21
6/25	79.9	20	59	69	81	5,589	6/27	3,048	83
6/26	77.0	48	142	211	81	17,091	6/28	5,742	198
6/27	79.7	5	14	225	81	18,225	6/29	16,086	13
6/28	74.6	4	13	238	81	19,278	6/30	26,130	-26
6/29	79.5	19	53	291	76	22,116	7/01	31,758	-30
6/30	79.4	16	49	340	68	23,120	7/02	32,112	-28
7/01	79.5	264	873	1,213	58	70,354	7/03	84,348	-17
7/02	40.4	325	1,983	3,196	53	169,388	7/04	232,902	-27
7/03	21.0	131	1,497	4,693	80	375,440	7/05	417,390	-10
7/04	41.1	432	2,546	7,239	69	499,491	7/06	597,258	-16
7/05	38.1	272	1,714	8,953	84	752,052	7/07	752,646	0
7/06	38.6	175	1,076	10,029	84	842,436	7/08	832,662	1
7/07	42.4	149	853	10,882	81	881,442	7/09	979,920	-10
7/08	42.2	267	1,518	12,400	80	992,000	7/10	1,365,540	-27
7/09	26.6	476	4,673	17,073	81	1,382,913	7/11	1,795,476	-23
7/10	37.6	384	2,410	19,483	85	1,656,055	7/12	2,070,624	-20
7/11	33.0	208	1,579	21,062	95	2,000,890	7/13	2,181,300	-8
7/12	29.3	249	2,108	23,170	100	2,317,000	7/14	2,238,450	4
7/13	35.9	177	1,109	24,279	99	2,403,621	7/15	2,269,344	6
7/14	35.6	23	138	24,417	95	2,319,615	7/16	2,279,946	2
7/15	35.4	22	153	24,570	92	2,260,440	7/17	2,284,782	-1
7/16	19.8	40	471	25,041	91	2,278,731	7/18	2,290,584	-1
6/22 - 7/16						Mean Percent Error (MPE)			31
						Mean Absolute Percent Error (MAPE)			52
6/29 - 7/16						Mean Percent Error (MPE)			-11
						Mean Absolute Percent Error (MAPE)			13

<sup>1</sup> The 1985-97 mean escapement per index point relationship (81 EPI) was used until June 29 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at the end of the season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 19. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Egegik River, 1998.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/14	28.9	17	127	127	72	9,144	6/17	<sup>3</sup>	
6/15	51.4	66	327	454	72	32,688	6/18	24	136,100
6/16	56.0	45	227	681	72	49,032	6/19	216	22,600
6/17	56.7	18	82	763	72	54,936	6/20	2,232	2,361
6/18	54.5	20	89	852	72	61,344	6/21	3,780	1,523
6/19	59.5	24	94	946	72	68,112	6/22	4,914	1,286
6/20	59.3	27	108	1,054	72	75,888	6/23	19,980	280
6/21	59.8	64	266	1,320	72	95,040	6/24	41,178	131
6/22	25.6	108	1,044	2,364	72	170,208	6/25	68,652	148
6/23	66.9	83	290	2,654	72	191,088	6/26	90,600	111
6/24	55.6	152	773	3,427	46	157,642	6/27	122,994	28
6/25	73.6	257	870	4,297	46	197,662	6/28	148,452	33
6/26	52.0	82	392	4,689	41	192,249	6/29	198,480	-3
6/27	58.5	154	835	5,524	41	226,484	6/30	244,722	-7
6/28	57.4	46	187	5,711	41	234,151	7/1	340,398	-31
6/29	50.6	192	1,184	6,895	43	296,485	7/2	425,676	-30
6/30	38.1	298	2,173	9,068	45	408,060	7/3	439,296	-7
7/1	65.7	62	238	9,306	55	511,830	7/4	489,732	5
7/2	64.5	34	122	9,428	55	518,540	7/5	504,582	3
7/3	51.6	110	721	10,149	43	436,407	7/6	575,598	-24
7/4	63.3	94	392	10,541	55	579,755	7/7	677,466	-14
7/5	47.0	231	1,332	11,873	54	641,142	7/8	713,742	-10
7/6	26.3	107	1,862	13,735	57	782,895	7/9	731,004	7
7/7	56.7	80	347	14,082	62	873,084	7/10	776,106	12
7/8	56.0	48	203	14,285	60	857,100	7/11	835,200	3
7/9	62.6	31	120	14,405	58	835,490	7/12	859,476	-3
7/10	62.4	79	318	14,723	63	927,549	7/13	889,242	4
7/11	58.9	151	682	15,405	61	939,705	7/14	953,022	-1
7/12	73.2	29	99	15,504	61	945,744	7/15	1,018,110	-7
7/13	60.4	208	972	16,476	65	1,070,940	7/16	1,032,480	4
6/15 - 7/13						Mean Percent Error(MPE)	5,672		
						Mean Absolute Percent Error(MAPE)	5,682		
6/24 - 7/13						Mean Percent Error(MPE)	-2		
						Mean Absolute Percent Error(MAPE)	12		

<sup>1</sup> The 1985-97 mean escapement per index point relationship (72 EPI) was used until June 24 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 3 d.

<sup>3</sup> Observation towers not in operation.

Table 20. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Ugashik River, 1998.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/26	111.6	24	53	53	54	2,862	6/28	<sup>3</sup>	
6/27	116.4	14	29	82	54	4,428	6/29	<sup>3</sup>	
6/28	120.1	17	34	116	54	6,264	6/30	<sup>3</sup>	
6/29	121.1	13	25	141	54	7,614	7/1	<sup>3</sup>	
6/30	119.1	8	16	157	54	8,478	7/2	72	11,675
7/1	119.6	13	26	183	54	9,882	7/3	1,698	482
7/2	120.1	4	8	191	54	10,314	7/4	2,466	318
7/3	116.9	13	27	218	54	11,772	7/5	3,600	227
7/4	116.9	3	6	224	54	12,096	7/6	5,136	136
7/5	58.3	4	16	240	54	12,960	7/7	11,976	8
7/6	118.5	30	61	301	54	16,254	7/8	22,146	-27
7/7	89.7	76	220	521	43	22,403	7/9	37,260	-40
7/8	65.0	84	348	869	53	46,057	7/10	52,482	-12
7/9	71.3	68	279	1,148	53	60,844	7/11	86,538	-30
7/10	76.6	172	540	1,688	53	89,464	7/12	141,216	-37
7/11	19.6	121	1,427	3,115	53	165,095	7/13	239,064	-31
7/12	38.1	294	1,911	5,026	64	321,664	7/14	402,414	-20
7/13	40.0	217	1,304	6,330	76	481,080	7/15	494,700	-3
7/14	39.6	112	677	7,007	76	532,532	7/16	522,144	2
7/15	35.8	76	528	7,535	78	587,730	7/17	538,890	9
7/16	38.4	42	262	7,797	73	569,181	7/18	557,562	2
7/17	39.6	26	156	7,953	71	564,663	7/19	575,118	-2
7/18	40.2	49	290	8,243	71	585,253	7/20	589,920	-1
6/30 - 7/18						Mean Percent Error(MPE)			666
						Mean Absolute Percent Error(MAPE)			687
7/7 - 7/18						Mean Percent Error(MPE)			-13
						Mean Absolute Percent Error(MAPE)			16

<sup>1</sup> The 1985-97 mean escapement per index point relationship (54 EPI) was used until July 7 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

Table 21. Sockeye salmon spawning escapement test-fishing data summary and comparison to tower counts, Igushik River, 1998.

Date	Test Fishing						Observation Tower		Percent Error of Test Fishing Estimate
	Fishing Time(min)	Catch (no)	Daily Index	Cumulative Index	Escapement per Index Pt. <sup>1</sup>	Cumulative Escapement	Date Plus Travel Time <sup>2</sup>	Cumulative Escapement	
6/16	103.0	0	0	0	61	-	6/18	<sup>3</sup>	
6/17	112.6	0	0	0	61	-	6/19	<sup>3</sup>	
6/18	72.2	0	0	0	61	-	6/20	<sup>3</sup>	
6/19	90.6	0	0	0	61	-	6/21	<sup>3</sup>	
6/20	50.9	0	0	0	61	-	6/22	<sup>3</sup>	
6/21	97.2	0	0	0	61	-	6/23	<sup>3</sup>	
6/22	50.7	0	0	0	61	-	6/24	0	
6/23	96.0	0	0	0	61	-	6/25	0	
6/24	94.9	4	11	11	61	671	6/26	0	
6/25	105.5	18	36	47	61	2,867	6/27	0	
6/26	101.0	17	39	86	61	5,246	6/28	6	
6/27	100.9	3	6	92	61	5,612	6/29	384	1,361
6/28	99.1	23	55	147	61	8,967	6/30	1,362	558
6/29	102.3	7	16	163	61	9,943	7/1	2,286	335
6/30	97.3	28	66	229	61	13,969	7/2	3,066	356
7/1	92.7	31	82	311	61	18,971	7/3	5,334	256
7/2	73.5	305	1,081	1,392	33	45,936	7/4	20,124	128
7/3	27.3	228	2,081	3,473	36	125,028	7/5	52,446	138
7/4	69.3	416	1,475	4,948	34	168,232	7/6	86,826	94
7/5	69.2	272	1,081	6,029	25	150,725	7/7	103,362	46
7/6	92.5	164	437	6,466	16	103,456	7/8	117,396	-12
7/7	77.6	274	958	7,424	16	118,784	7/9	136,230	-13
7/8	76.7	215	775	8,199	17	139,383	7/10	155,592	-10
7/9	84.1	99	332	8,531	17	145,027	7/11	162,756	-11
7/10	90.3	68	185	8,716	18	156,888	7/12	168,882	-7
7/11	92.0	74	192	8,908	19	169,252	7/13	176,310	-4
7/12	92.5	64	172	9,080	19	172,520	7/14	186,372	-7
6/27 - 7/14						Mean Percent Error(MPE)			200
						Mean Absolute Percent Error(MAPE)			209
7/2 - 7/14						Mean Percent Error(MPE)			31
						Mean Absolute Percent Error(MAPE)			43

<sup>1</sup> The 1988-92, 94-97 mean escapement per index point relationship (61 EPI) was used until July 2 when lag-time relationships began to prove more accurate.

<sup>2</sup> Best travel time estimate at end of season was 2 d.

<sup>3</sup> Observation towers not in operation.

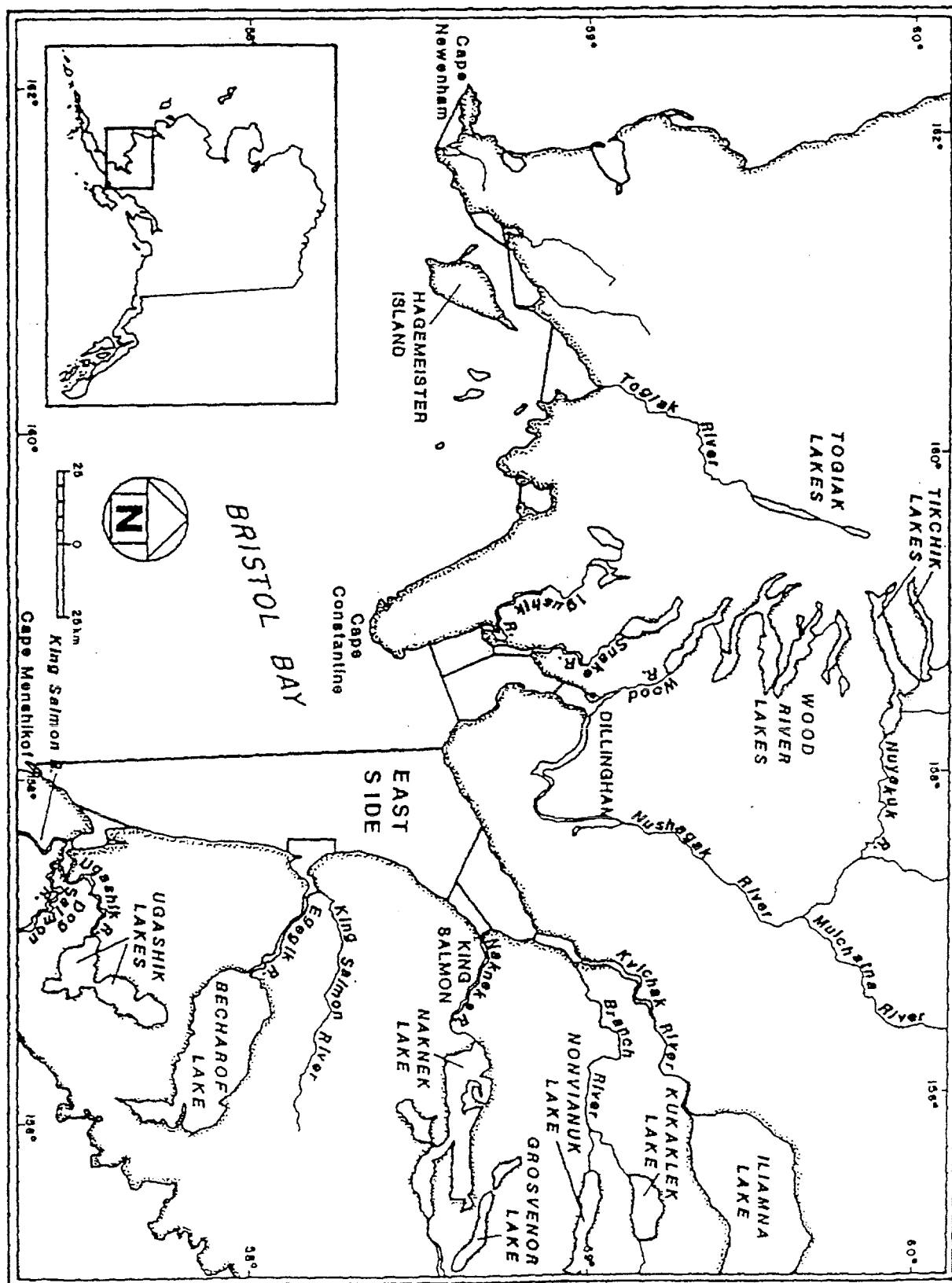


Figure 1. Bristol Bay major river systems and commercial fishing districts.

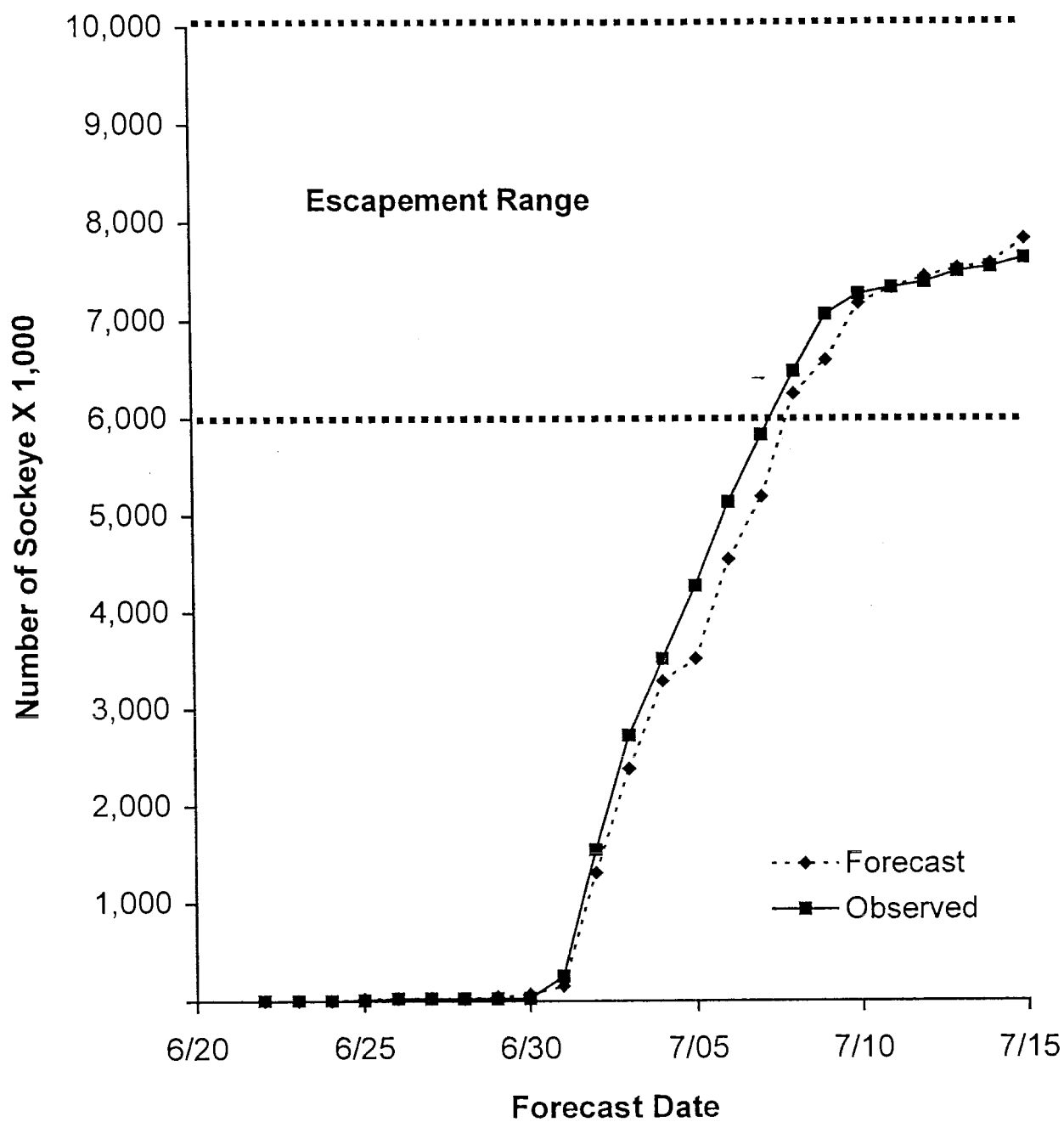


Figure 2. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Kvichak River, 1994.

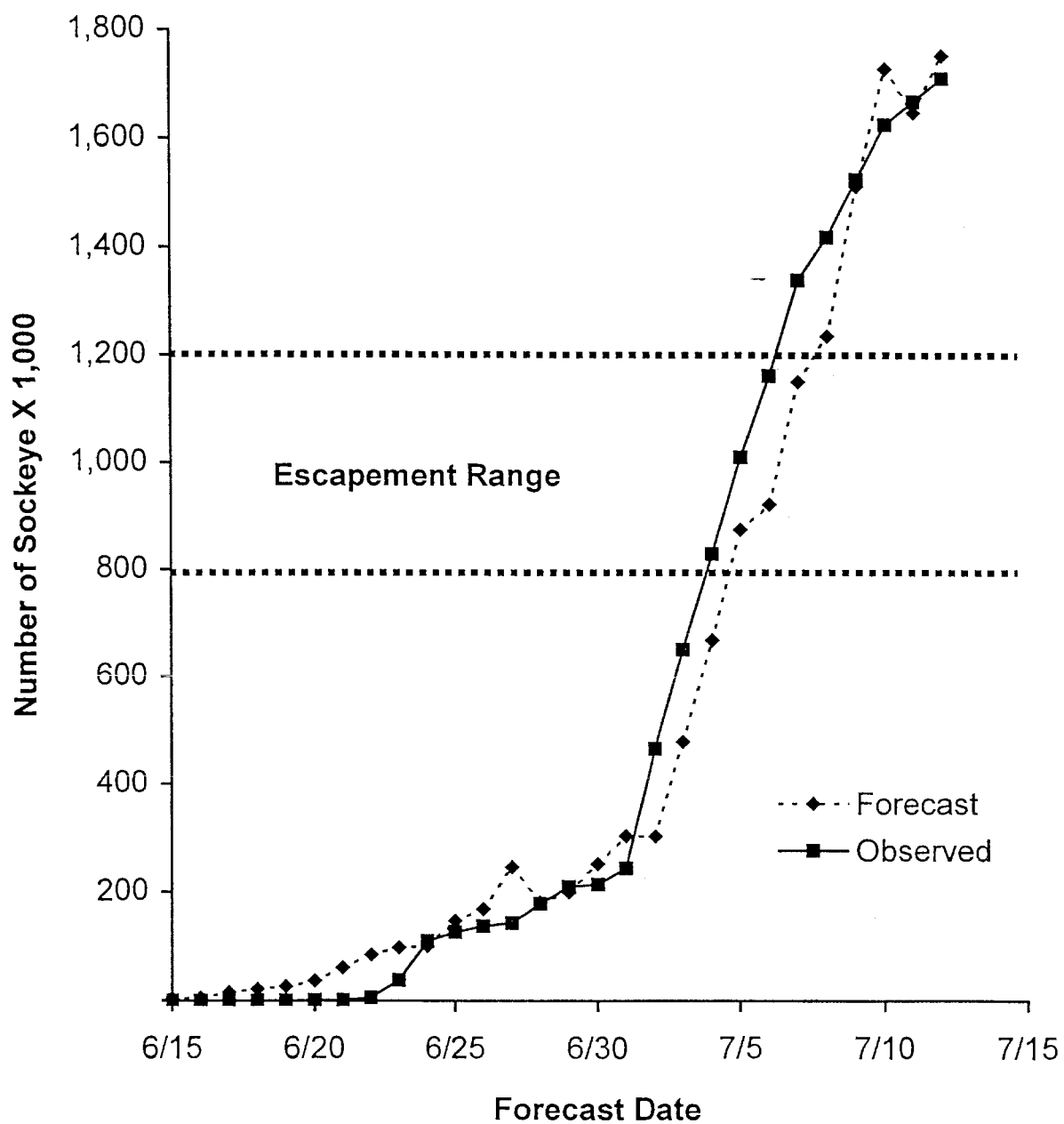


Figure 3. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Egegik River, 1994.

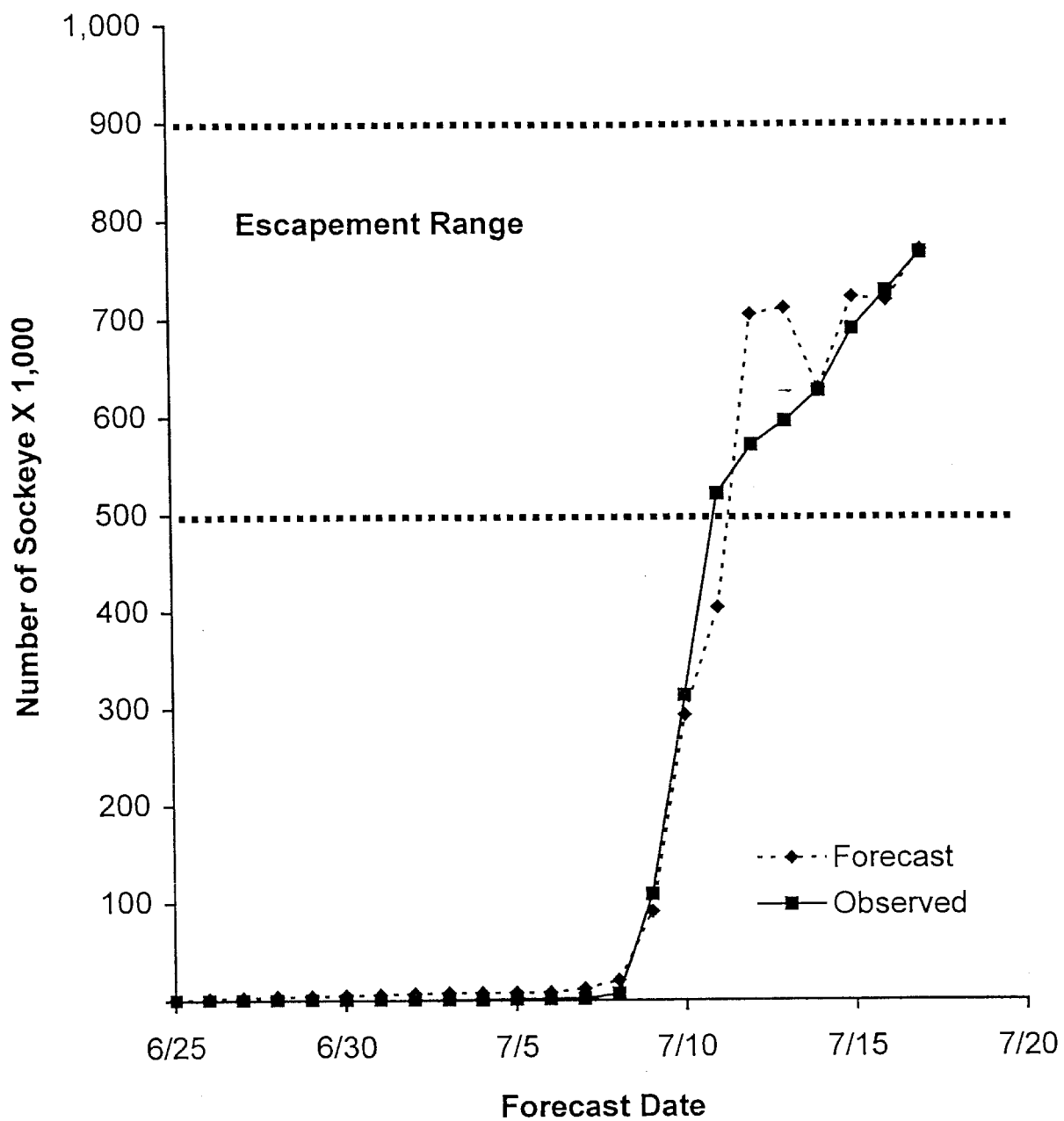


Figure 4. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Ugashik River, 1994.



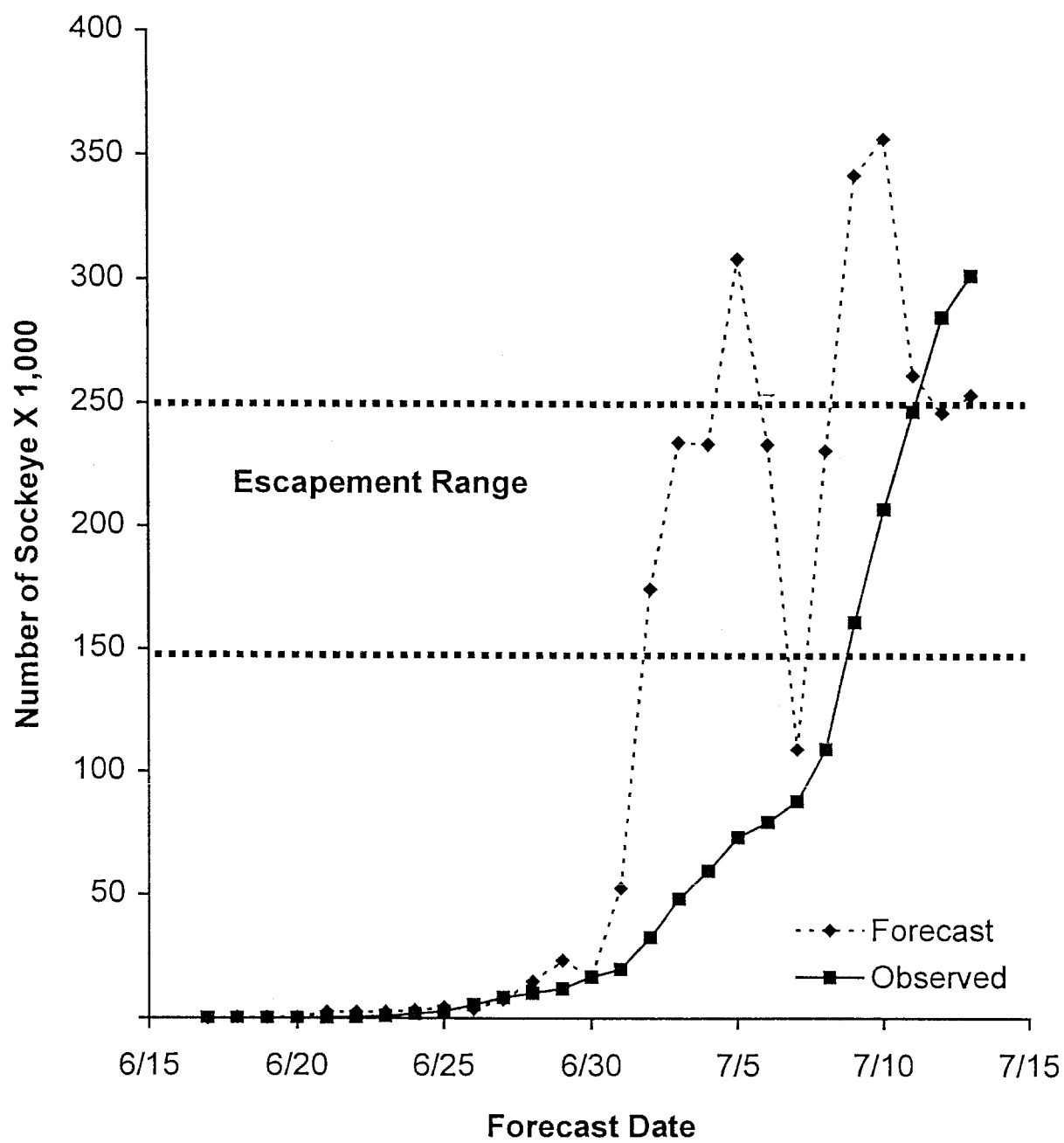


Figure 5. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Igushik River, 1994.

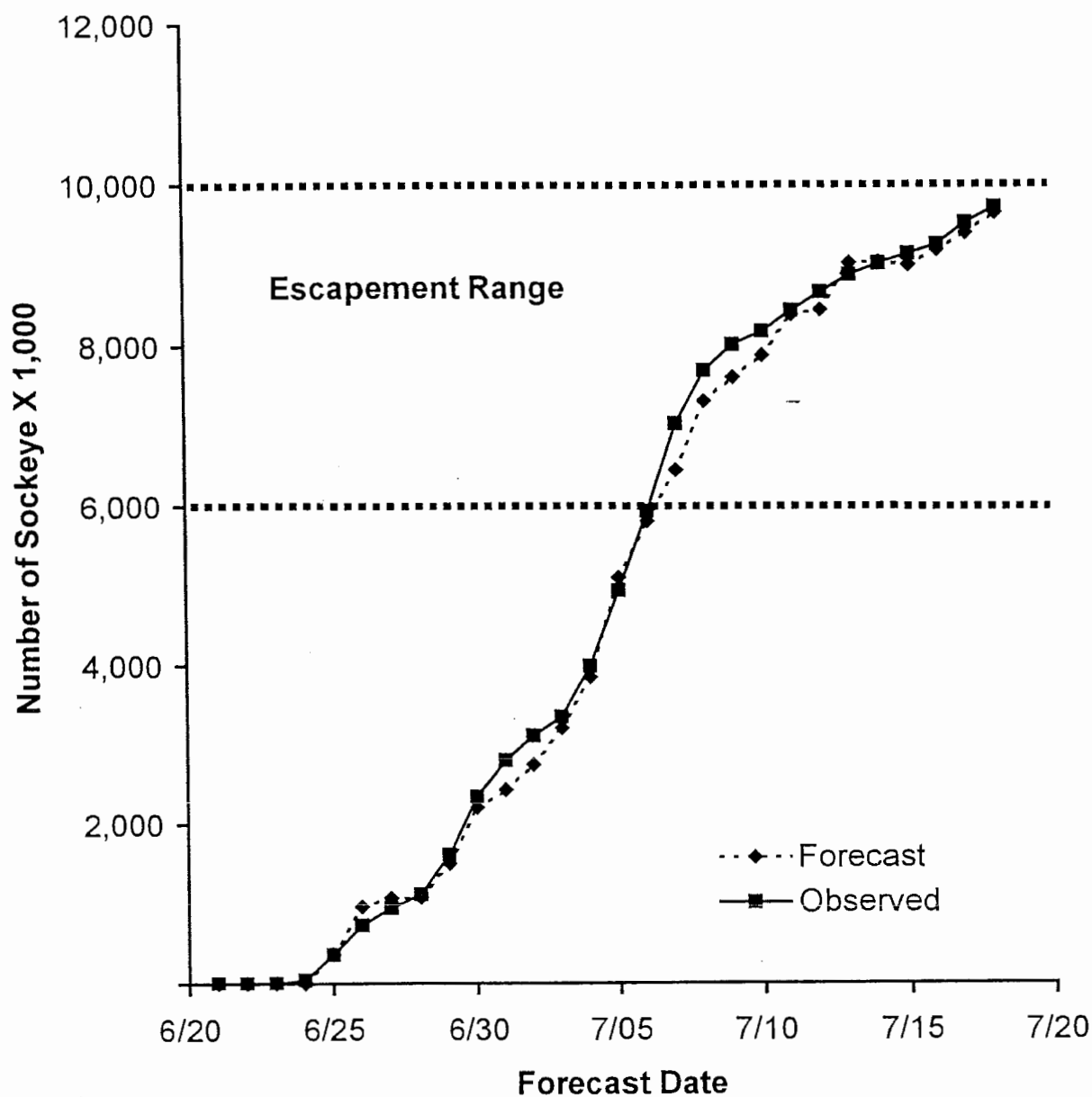


Figure 6. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Kvichak River, 1995.

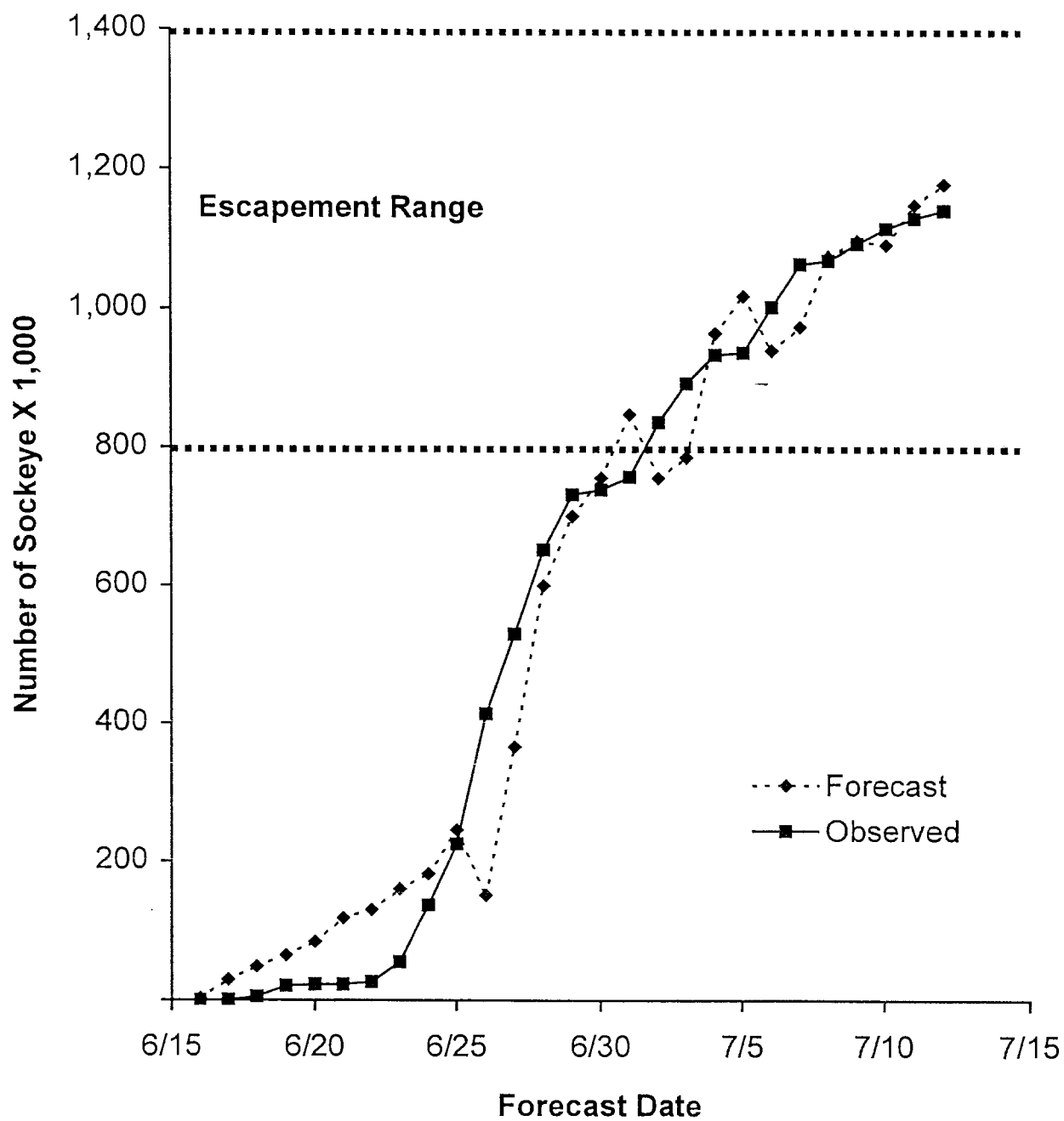


Figure 7. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Egegik River, 1995.

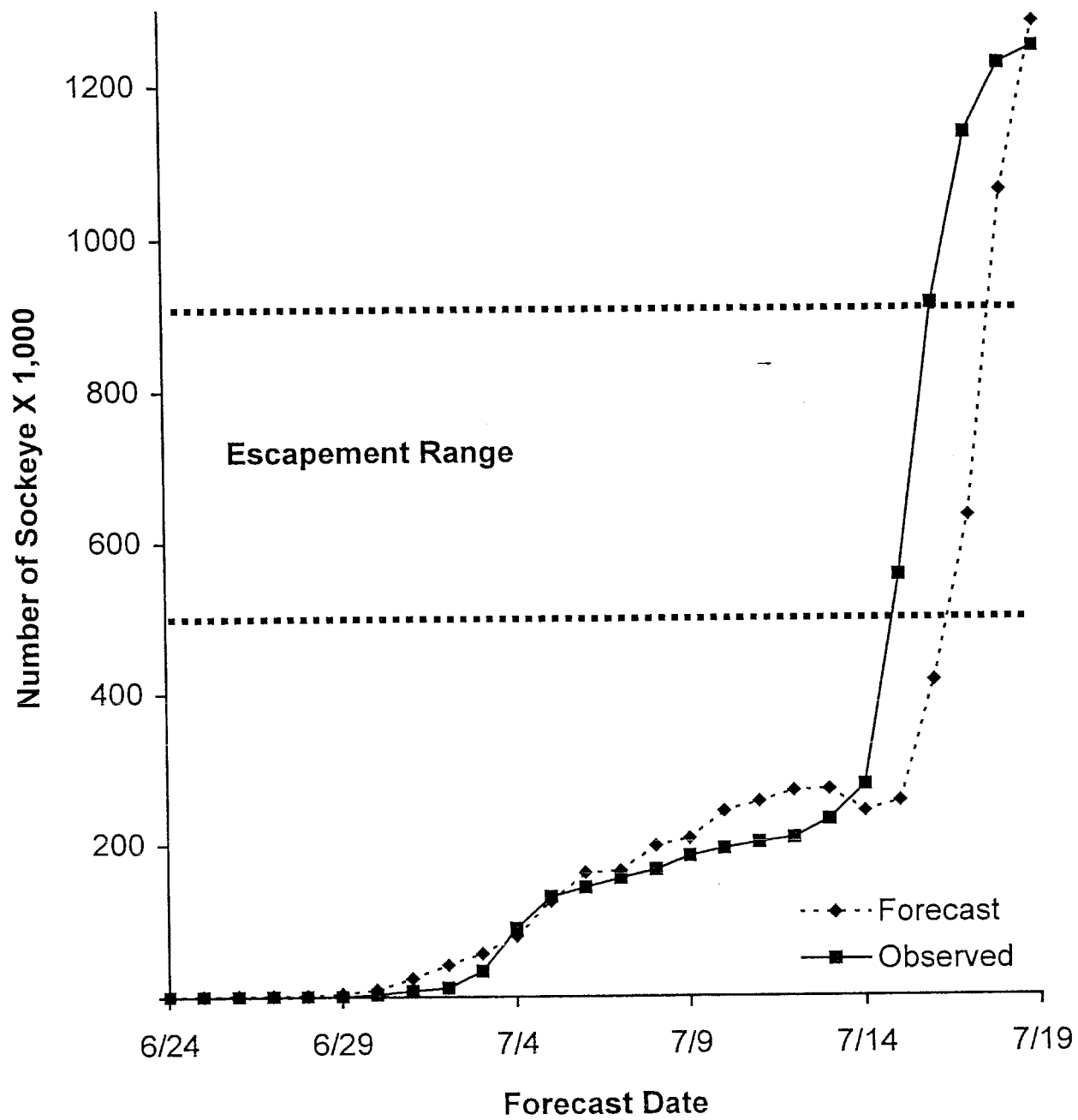


Figure 8. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Ugashik River, 1995.

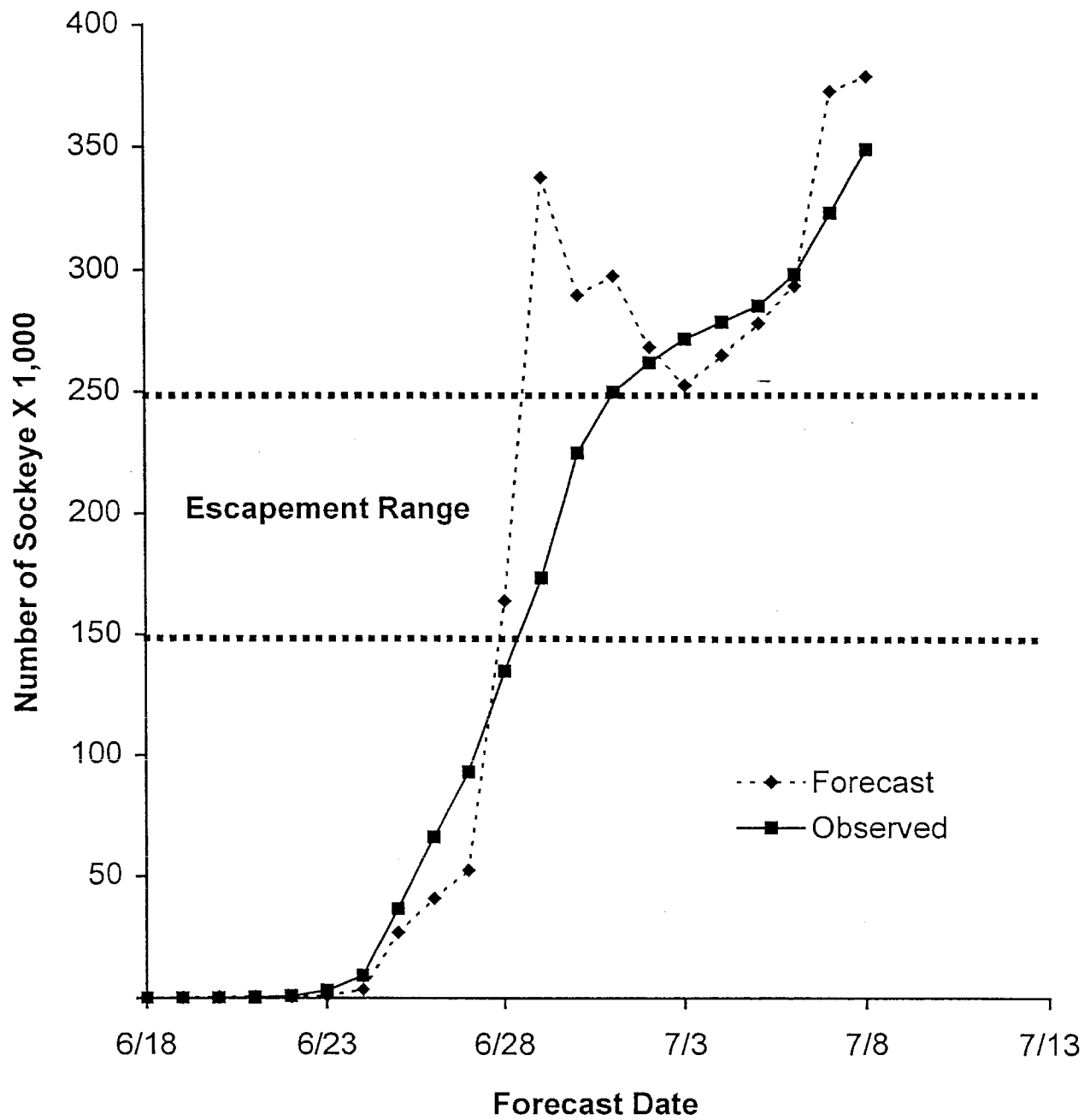


Figure 9. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Igushik River, 1995.

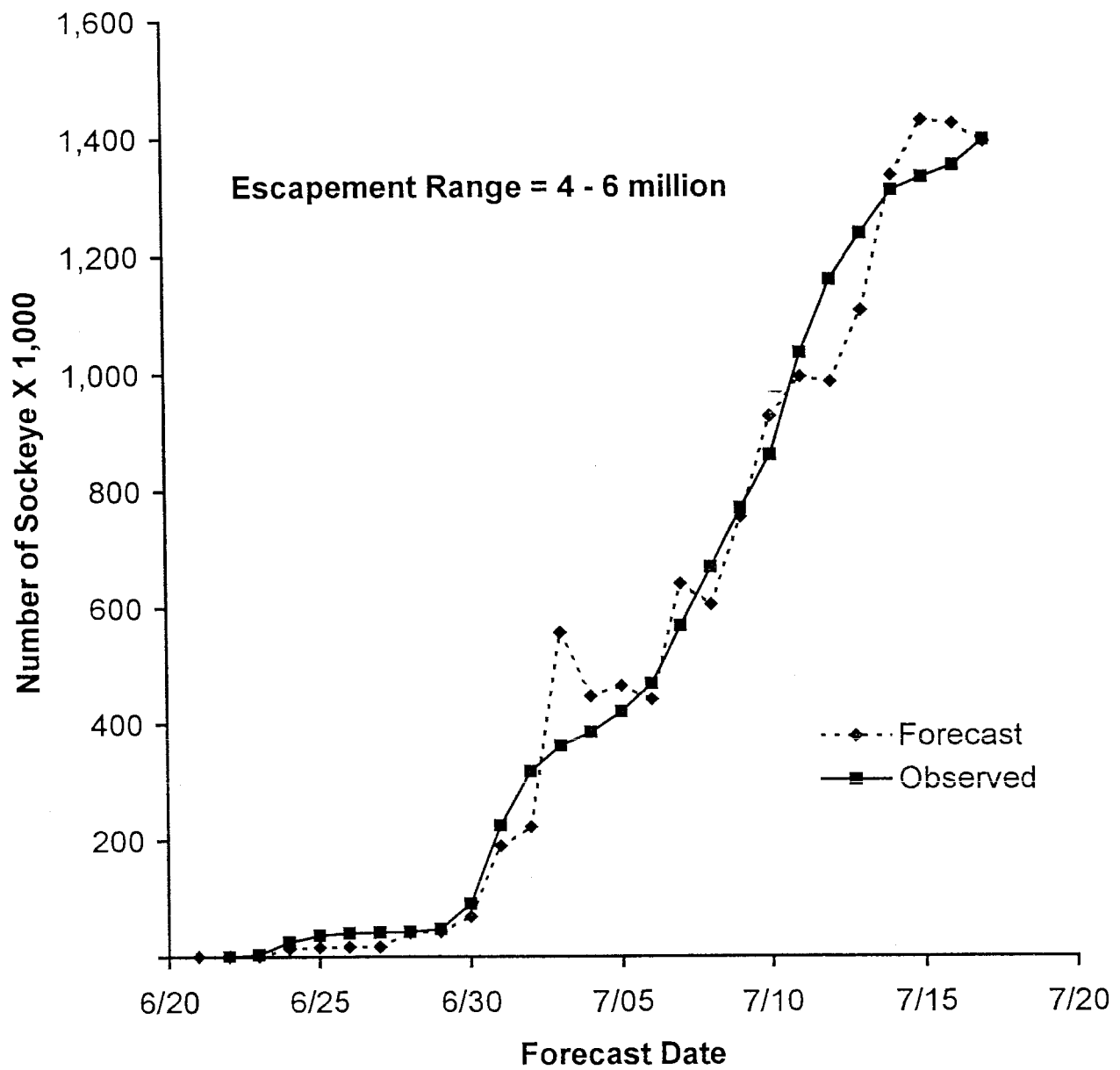


Figure 10. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Kvichak River, 1996.

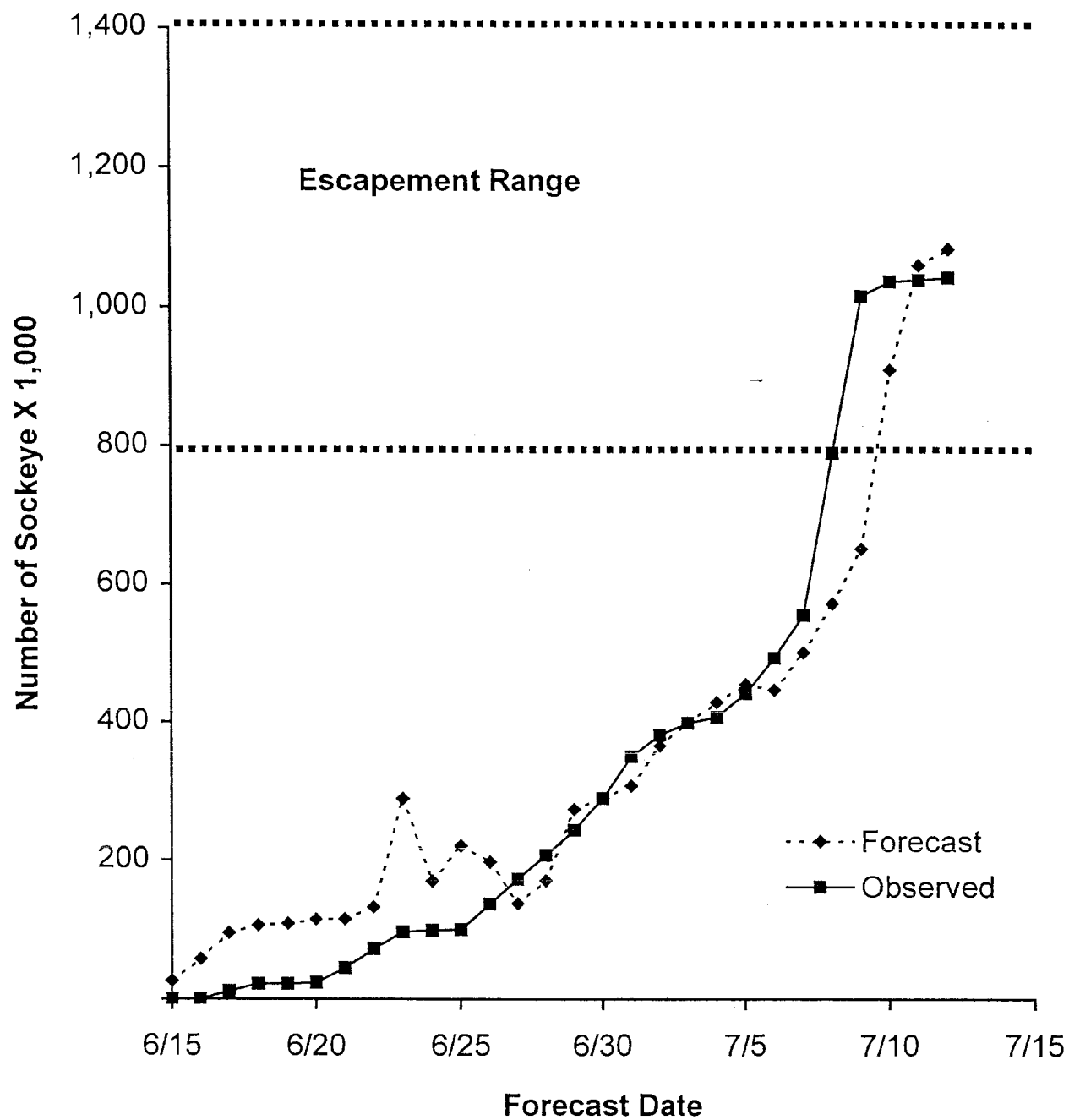


Figure 11. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Egegik River, 1996.

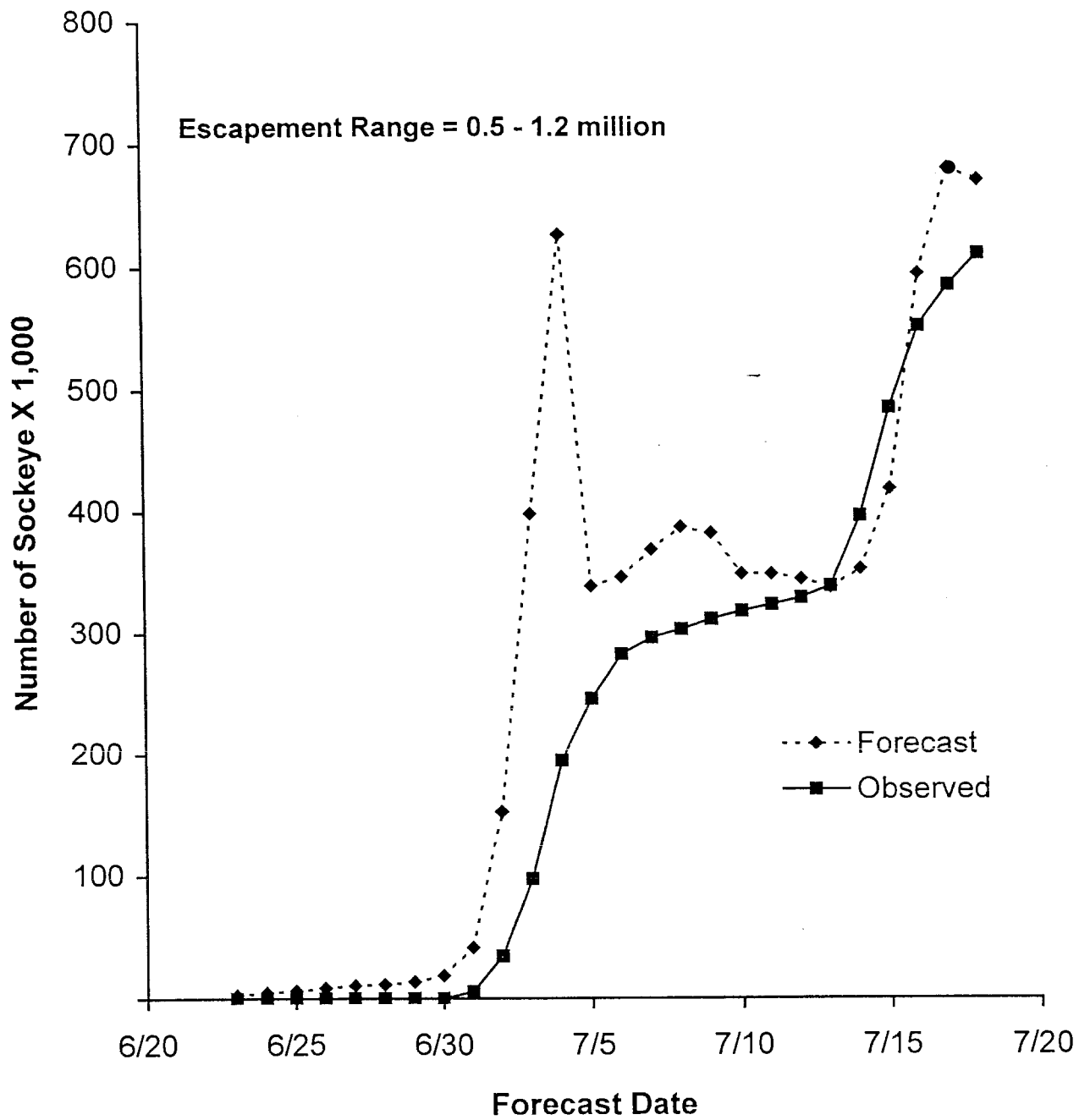


Figure 12. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Ugashik River, 1996.



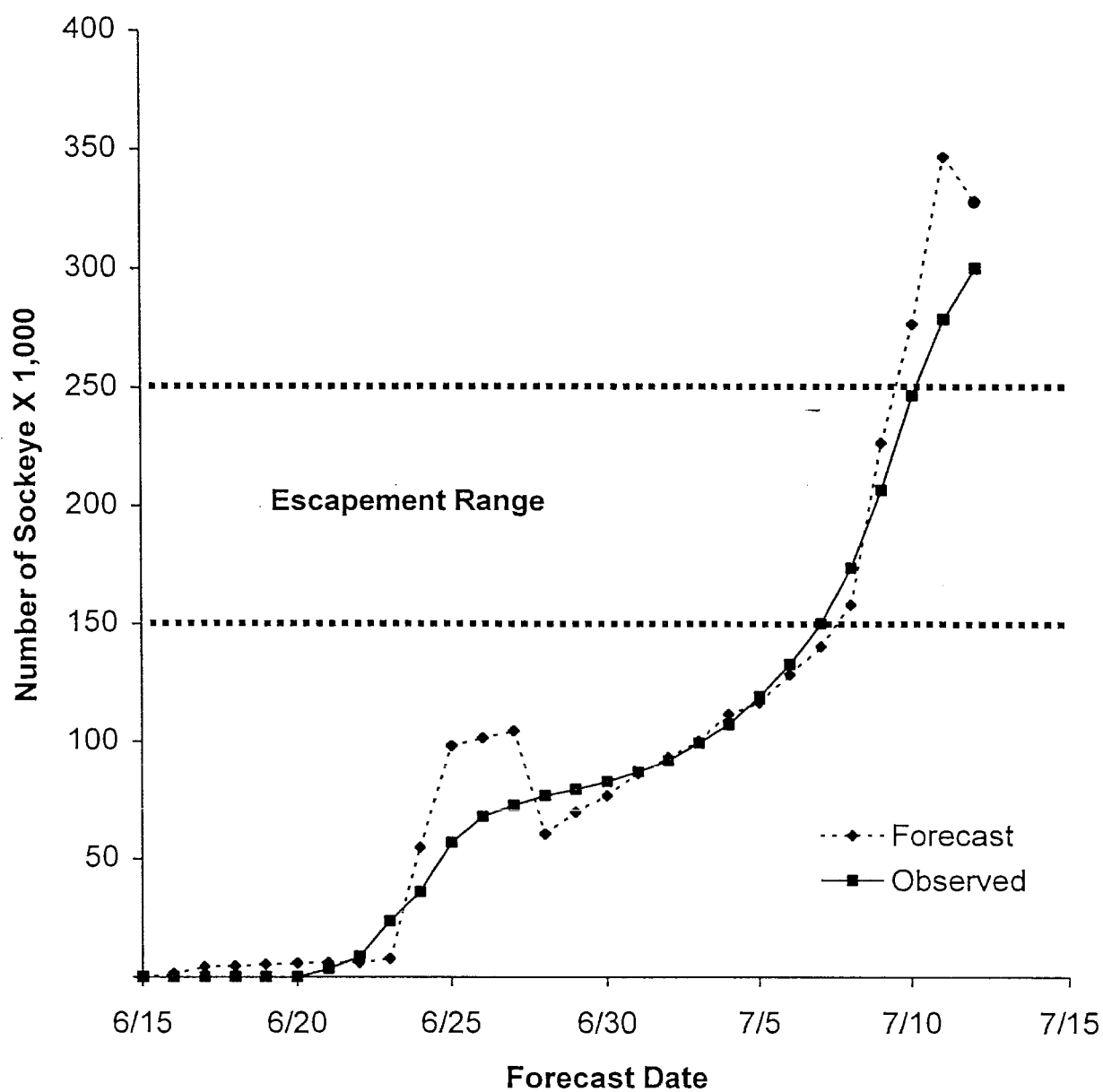


Figure 13. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Igushik River, 1996.

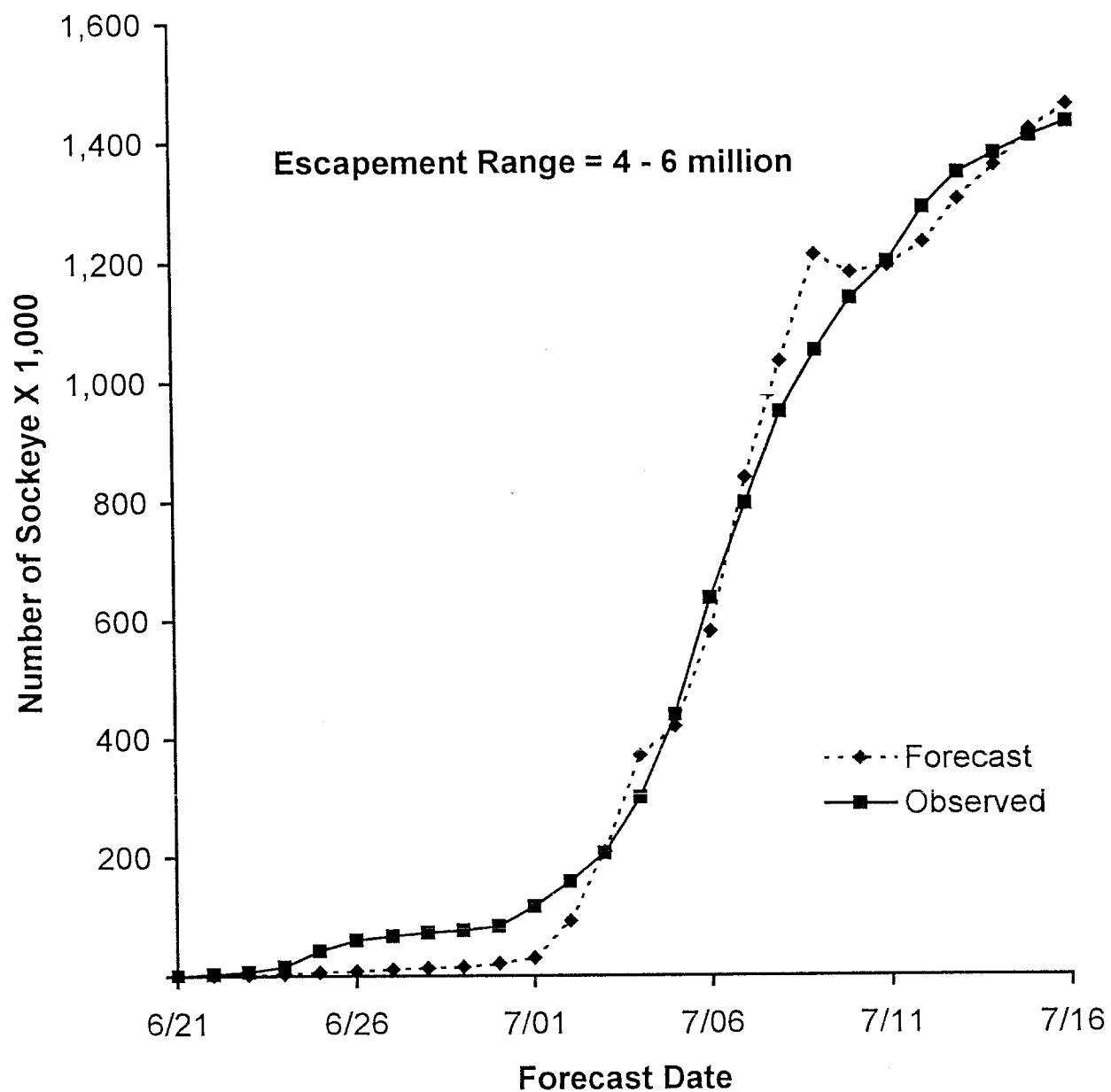


Figure 14. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Kvichak River, 1997.

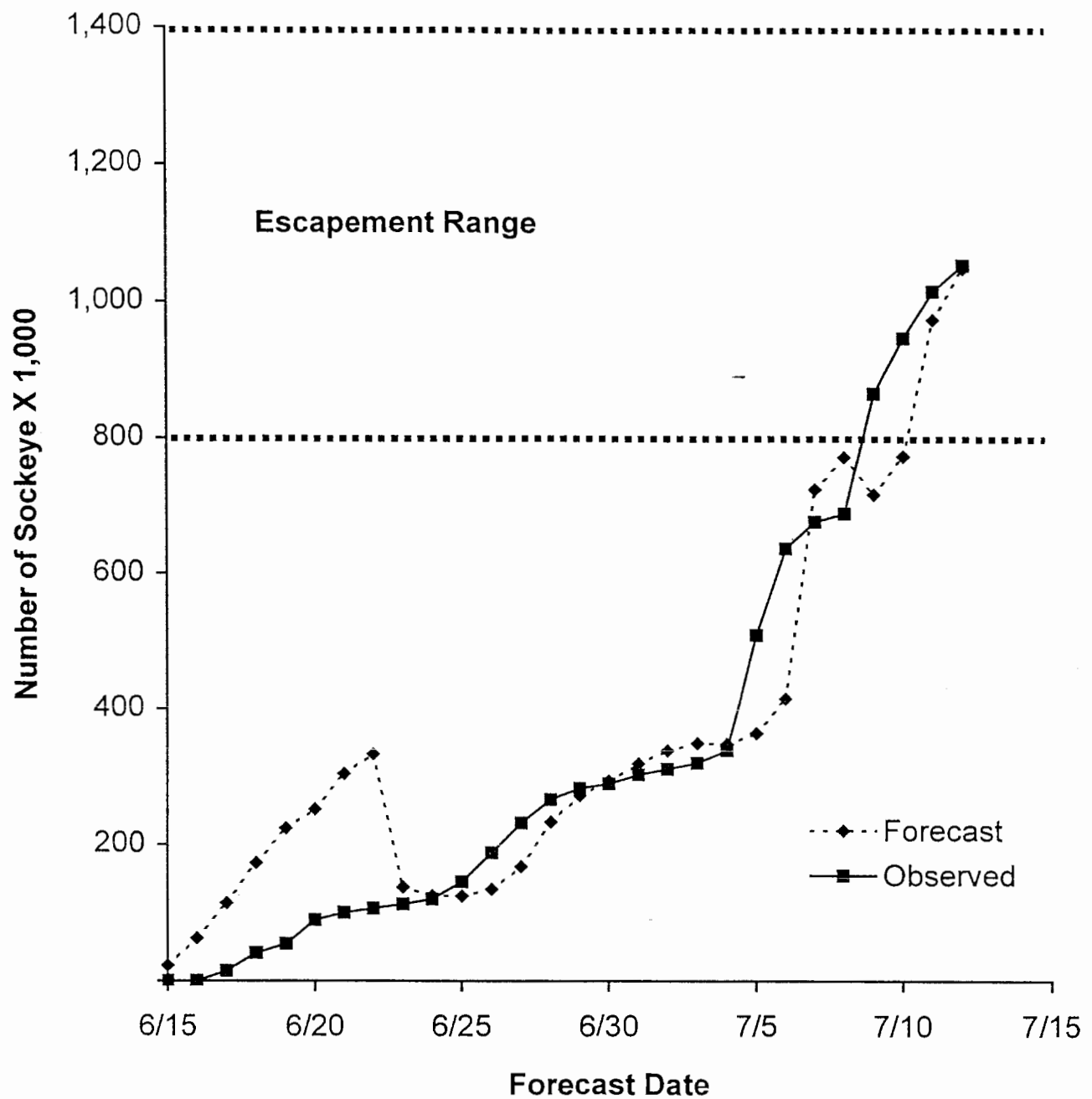


Figure 15. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Egegik River, 1997.

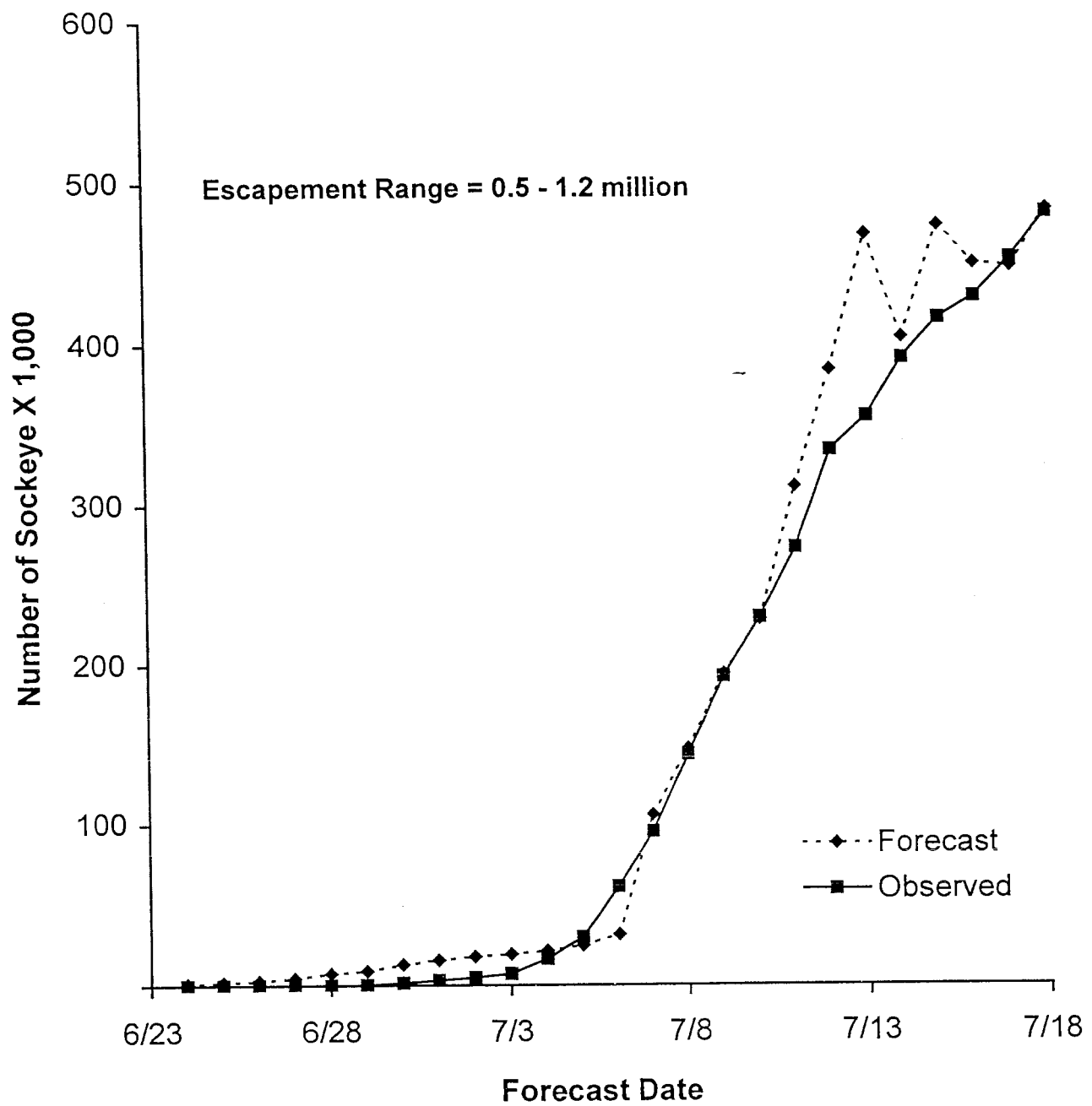


Figure 16. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Ugashik River, 1997.

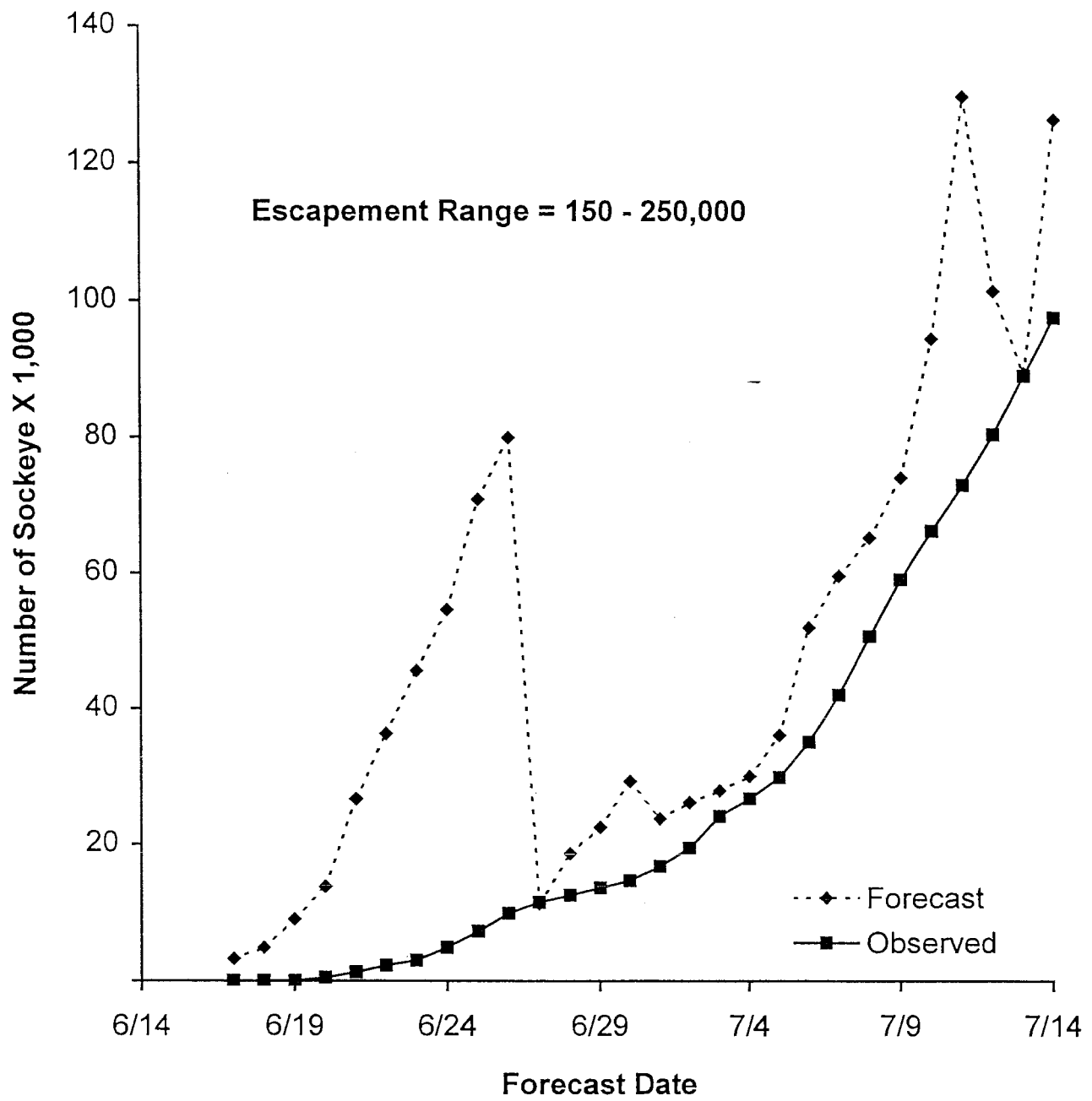


Figure 17. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Igushik River, 1997.

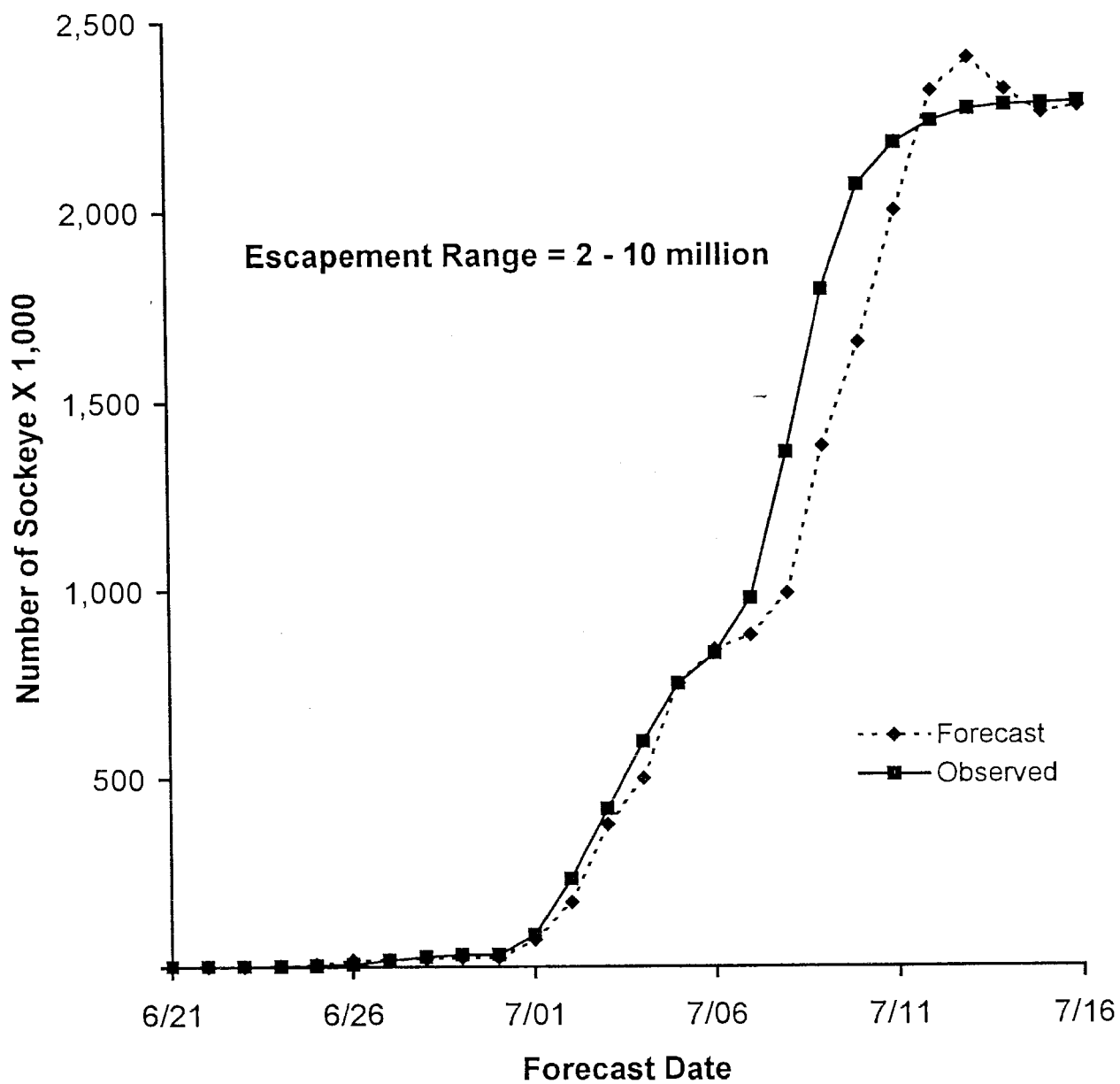


Figure 18. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Kvichak River, 1998.

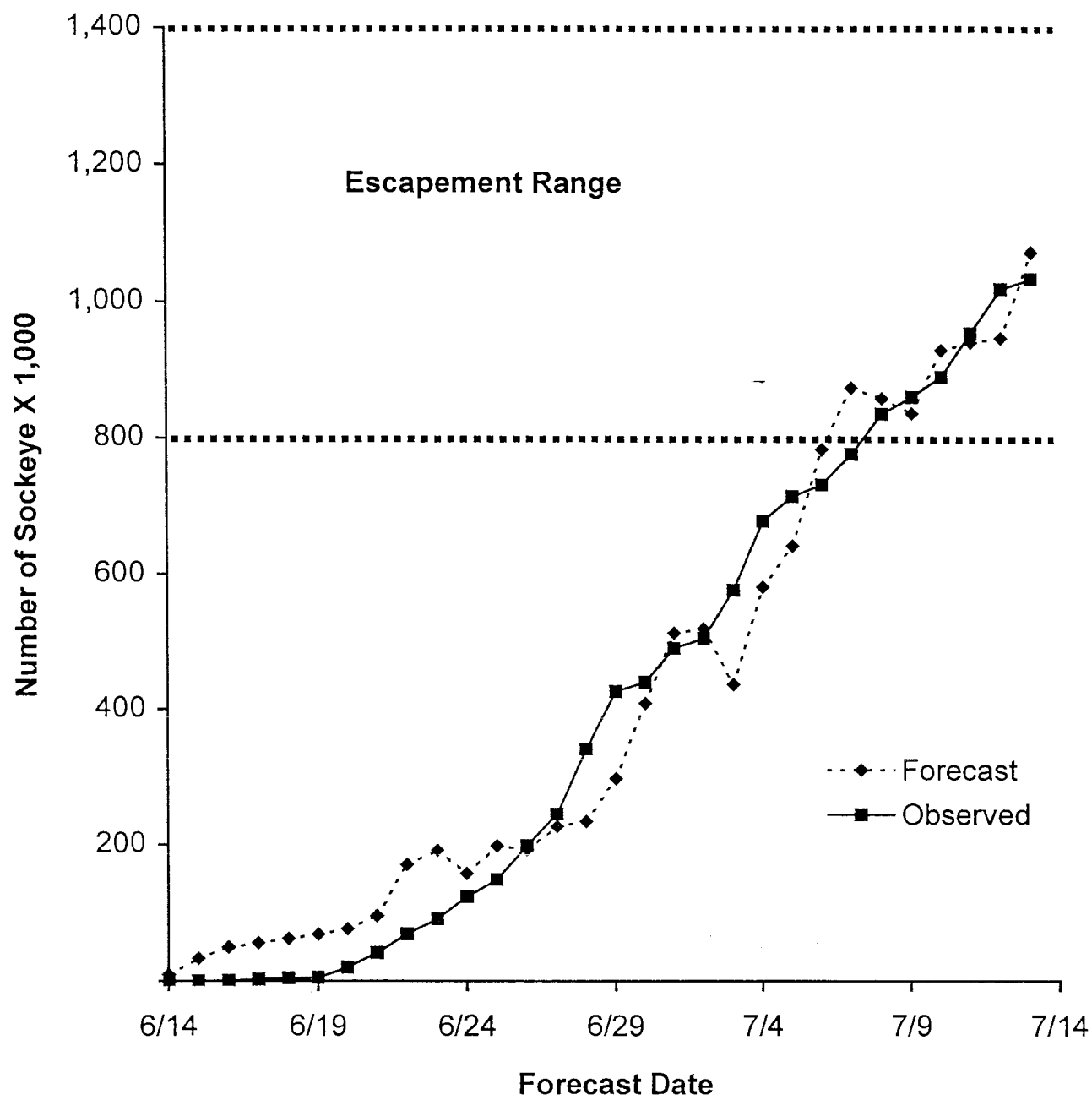


Figure 19. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Egegik River, 1998.

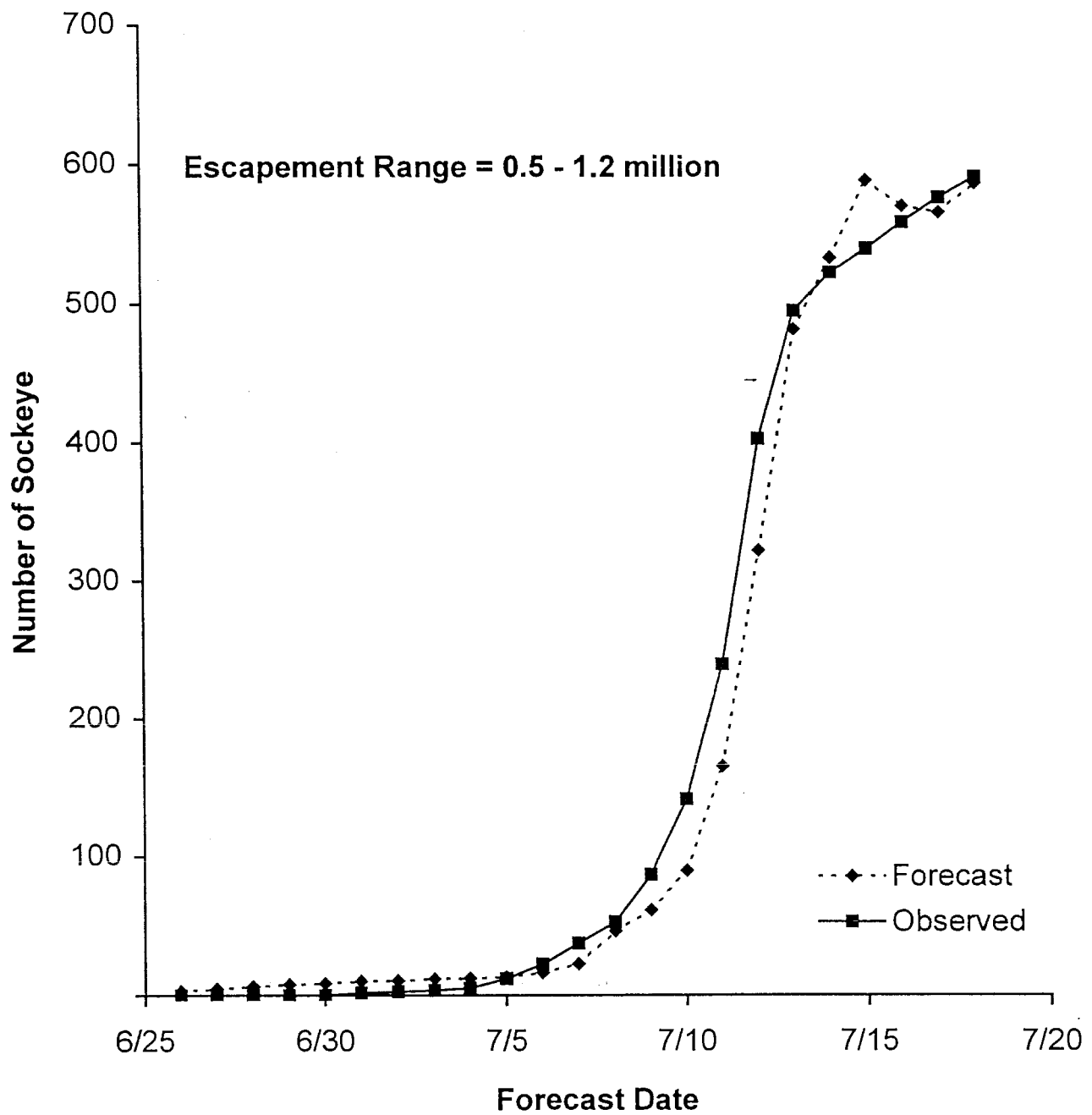


Figure 20. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Ugashik River, 1998.



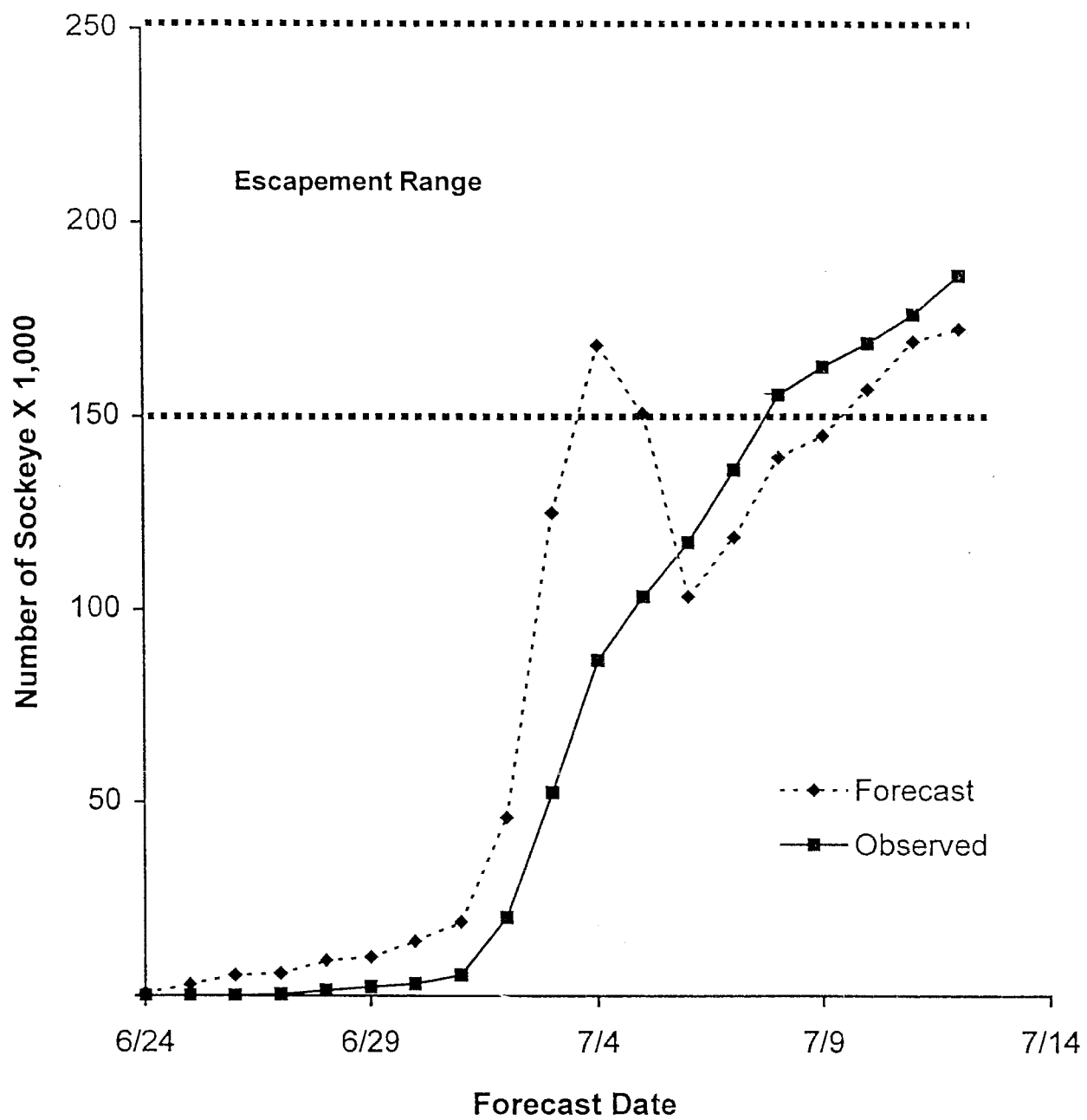


Figure 21. Comparison of in-season sockeye salmon test fish forecast and observed escapement, Igushik River, 1998.

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## APPENDIX

Appendix A.1. Sockeye salmon test-fishing data, Kvichak River, 1994.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/22	1	1	8.4	0	0	12
6/23	2	1	8.6	0	0	12
6/23	3	1	7.9	0	0	12
6/23	4	2	9.3	0	0	12
6/23	5	2	10.5	0	0	12
6/23	6	1	8.3	0	0	12
6/23	7	1	9.1	0	0	12
6/23	8	2	8.4	0	0	12
6/23	9	2	8.6	0	0	12
6/24	10	1	7.6	0	0	12
6/24	11	1	8.0	0	0	12
6/24	12	2	9.8	0	0	12
6/24	13	2	9.1	0	0	12
6/24	14	1	10.5	1	23	12
6/24	15	1	7.6	0	0	12
6/24	16	2	12.3	0	0	12
6/25	17	1	8.4	1	28	11
6/25	18	1	8.6	0	0	11
6/25	19	2	9.3	0	0	11
6/25	20	2	8.3	7	202	11
6/25	21	1	7.6	0	0	11
6/25	22	1	7.6	1	32	11
6/25	23	2	6.1	26	1023	11
6/25	24	2	5.4	9	400	11
6/26	25	1	9.0	0	0	10
6/26	26	1	8.9	0	0	10
6/26	27	2	9.4	0	0	10
6/26	28	2	9.4	0	0	10
6/26	29	1	7.8	0	0	11
6/26	30	1	7.8	0	0	11
6/26	31	2	7.8	2	61	11
6/26	32	2	7.6	2	63	11
6/27	33	1	8.4	0	0	11
6/27	34	1	8.4	0	0	11
6/27	35	2	8.8	0	0	11
6/27	36	2	8.9	0	0	11
6/27	37	1	7.8	0	0	12
6/27	38	1	7.6	0	0	12
6/27	39	2	8.3	0	0	12
6/27	40	2	7.6	0	0	12
6/28	41	1	7.8	0	0	11
6/28	42	1	7.4	0	0	11

-Continued-

Appendix A.1. (p 2 of 3)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/28	43	2	8.0	0	0	11
6/28	44	2	8.1	0	0	11
6/28	45	1	8.3	0	0	12
6/28	46	1	7.5	0	0	12
6/28	47	2	7.6	0	0	12
6/28	48	2	8.3	1	29	12
6/29	49	1	7.9	0	0	12
6/29	50	1	8.8	0	0	12
6/29	51	2	7.5	0	0	12
6/29	52	2	8.1	0	0	12
6/29	53	1	7.9	0	0	14
6/29	54	1	7.9	0	0	14
6/29	55	2	4.8	17	850	14
6/29	56	2	2.9	5	414	14
6/30	57	1	7.8	0	0	13
6/30	58	1	7.7	0	0	13
6/30	59	2	7.1	1	34	13
6/30	60	2	7.6	0	0	13
6/30	61	1	7.4	0	0	14
6/30	62	1	6.5	0	0	14
6/30	63	2	2.9	11	910	14
6/30	64	2	3.0	11	880	14
7/1	65	1	7.8	2	62	14
7/1	66	1	8.9	1	27	14
7/1	67	2	7.0	7	240	14
7/1	68	2	7.9	6	182	14
7/1	69	1	2.1	24	2743	12
7/1	70	1	1.6	10	1500	12
7/2	71	1	1.3	61	11262	12
7/2	72	2	1.3	55	10154	12
7/3	73	1	1.5	43	6880	11
7/3	74	2	1.0	74	17760	11
7/3	75	1	1.3	11	2031	12
7/3	76	2	1.0	54	12960	12
7/4	77	1	6.4	24	900	12
7/4	78	2	5.4	68	3022	12
7/4	79	1	5.5	15	655	11
7/4	80	2	1.7	65	9176	11
7/5	81	1	2.8	16	1371	11
7/5	82	2	1.8	25	3333	11
7/5	83	1	0.9	47	12533	11

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Appendix A.1. (p 3 of 3).

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/5	84	2	0.9	8	2133	11
7/6	85	1	1.3	38	7015	11
7/6	86	2	1.3	41	7569	11
7/6	87	1	1.8	34	4533	11
7/6	88	2	1.4	9	1543	11
7/7	89	1	10.4	3	69	11
7/7	90	2	1.8	32	4267	11
7/7	91	1	4.9	5	245	11
7/7	92	2	1.8	5	667	11
7/8	93	1	0.9	33	8800	11
7/8	94	2	1.9	45	5684	11
7/8	95	1	1.3	33	6092	11
7/8	96	2	1.4	26	4457	11
7/9	97	1	2.0	43	5160	11
7/9	98	2	1.3	16	2954	11
7/9	99	1	1.5	27	4320	12
7/9	100	2	0.9	29	7733	12
7/10	101	1	2.3	15	1565	12
7/10	102	2	8.4	21	600	12
7/10	103	1	1.5	36	5760	12
7/10	104	2	8.5	8	226	12
7/11	105	1	8.8	9	245	12
7/11	106	2	8.7	7	193	12
7/11	107	1	9.3	7	181	12
7/11	108	2	2.3	24	2504	12
7/12	109	1	8.6	14	391	12
7/12	110	2	9.6	12	300	12
7/12	111	1	9.6	1	25	12
7/12	112	2	5.0	48	2304	12
7/13	113	1	7.4	12	389	12
7/13	114	2	7.4	24	778	12
7/13	115	1	7.3	5	164	15
7/13	116	2	3.0	32	2560	15
7/14	117	1	8.4	17	486	14
7/14	118	2	8.4	15	429	14
7/14	119	1	9.8	0	0	15
7/14	120	2	9.0	14	373	15
7/15	121	1	2.3	33	3444	14
7/15	122	2	3.3	10	727	14
7/15	123	1	3.6	1	67	14
7/15	124	2	3.0	53	4240	14

Appendix A.2. Sockeye salmon test-fishing data, Egegik River, 1994.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/15	1	1	6.0	0	0	-
6/15	2	2	5.6	1	43	-
6/15	3	1	8.6	0	0	-
6/15	4	2	9.7	6	149	-
6/15	5	1	13.3	4	72	-
6/15	6	2	11.5	1	21	-
6/16	7	1	6.9	0	0	-
6/16	8	2	4.4	0	0	-
6/16	9	1	11.0	0	0	-
6/16	10	2	6.3	0	0	-
6/16	11	1	7.8	0	0	-
6/16	12	2	9.6	1	25	-
6/16	13	1	5.4	2	89	-
6/16	14	2	10.4	3	69	-
6/17	15	1	6.3	9	343	9
6/17	16	2	6.3	7	265	9
6/17	17	1	8.4	1	30	9
6/17	18	2	5.9	3	125	9
6/17	19	1	7.2	2	65	9
6/17	20	2	7.3	7	230	9
6/17	21	1	5.7	0	0	9
6/17	22	2	7.6	1	30	9
6/18	23	1	6.8	0	0	9
6/18	24	2	4.2	0	0	9
6/18	25	1	8.5	4	113	9
6/18	26	2	5.4	1	44	9
6/18	27	1	6.8	0	0	11
6/18	28	2	5.1	3	141	11
6/18	29	1	6.0	0	0	11
6/18	30	2	5.8	8	331	11
6/19	31	1	6.0	0	0	11
6/19	32	2	5.6	3	130	11
6/19	33	1	7.3	4	130	11
6/19	34	2	5.0	0	0	11
6/19	35	1	5.5	1	45	11
6/19	36	2	7.9	4	120	11
6/19	37	1	6.1	3	120	11
6/19	38	2	4.7	0	0	11
6/20	39	1	6.3	0	0	11
6/20	40	2	5.3	5	226	11

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Appendix A.2. (p 2 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/20	41	1	6.2	6	232	11
6/20	42	2	7.9	4	120	11
6/20	43	1	5.5	2	87	11
6/20	44	2	6.2	7	270	11
6/20	45	1	6.0	3	120	11
6/20	46	2	7.2	1	33	11
6/21	47	1	8.2	4	117	11
6/21	48	2	8.0	27	810	11
6/21	49	1	7.4	5	160	11
6/21	50	2	7.0	8	275	11
6/21	51	1	10.7	5	110	10
6/21	52	2	6.5	6	220	10
6/21	53	1	7.1	1	34	10
6/21	54	2	6.9	5	175	10
6/22	55	1	8.7	27	745	11
6/22	56	2	6.7	27	967	11
6/22	57	1	8.9	7	190	11
6/22	58	2	7.3	5	165	11
6/22	59	1	5.7	2	84	10
6/22	60	2	7.7	1	31	10
6/22	61	1	6.7	7	251	10
6/22	62	2	6.6	3	110	10
6/23	63	1	4.9	5	245	10
6/23	64	2	19.9	53	639	10
6/23	65	1	5.6	1	43	11
6/23	66	2	6.1	0	0	11
6/24	67	1	7.1	0	0	10
6/24	68	2	6.3	0	0	10
6/24	69	1	5.5	1	44	10
6/24	70	2	7.2	1	34	10
6/24	71	1	7.1	3	100	10
6/24	72	2	7.6	3	95	10
6/24	73	1	7.4	0	0	10
6/24	74	2	5.4	2	90	10
6/25	75	1	6.7	1	36	8
6/25	76	2	7.3	3	99	8
6/25	77	1	6.8	1	35	8
6/25	78	2	9.9	5	120	8
6/25	79	1	3.4	53	3740	8
6/25	80	2	7.2	6	200	8

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Appendix A.2. (p 3 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/25	81	1	6.0	2	80	8
6/25	82	2	8.9	2	55	8
6/26	83	1	7.0	0	0	8
6/26	84	2	7.5	2	64	8
6/26	85	1	8.1	0	0	8
6/26	86	2	7.2	0	0	8
6/26	87	1	6.2	5	195	8
6/26	88	2	7.3	1	35	8
6/26	89	1	6.6	2	73	8
6/26	90	2	7.1	0	0	8
6/27	91	1	10.4	6	139	8
6/27	92	2	6.4	14	525	8
6/27	93	1	6.2	3	116	8
6/27	94	2	5.8	11	455	8
6/27	95	1	12.8	14	265	9
6/27	96	2	5.5	27	1180	9
6/27	97	1	4.0	21	1260	9
6/27	98	2	5.2	7	323	9
6/28	99	1	6.0	1	40	11
6/28	100	2	4.6	1	52	11
6/28	101	1	7.0	0	0	11
6/28	102	2	5.2	3	140	11
6/28	103	1	6.0	2	80	11
6/28	104	2	7.2	3	100	11
6/28	105	1	8.1	4	120	11
6/28	106	2	6.6	1	36	11
6/29	107	1	6.7	3	108	11
6/29	108	2	6.4	4	150	11
6/29	109	1	8.4	11	315	11
6/29	110	2	7.0	8	274	11
6/29	111	1	8.5	4	115	12
6/29	112	2	8.1	2	59	12
6/29	113	1	7.0	2	70	12
6/29	114	2	7.4	5	160	12
6/30	115	1	6.9	13	452	12
6/30	116	2	5.5	18	785	12
6/30	117	1	6.2	31	1200	12
6/30	118	2	4.8	44	2200	12
6/30	119	1	4.1	19	1112	12
6/30	120	2	5.9	27	1090	12

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Appendix A.2. (p 4 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/30	121	1	5.7	4	170	12
6/30	122	2	6.3	3	115	12
7/1	123	1	8.0	1	30	12
7/1	124	2	5.6	0	0	12
7/1	125	1	7.4	2	65	12
7/1	126	2	7.4	5	162	12
7/1	127	1	8.1	1	30	10
7/1	128	2	6.5	0	0	10
7/1	129	1	8.3	0	0	10
7/1	130	2	8.8	1	27	10
7/2	131	1	6.6	1	36	10
7/2	132	2	6.9	10	348	10
7/2	133	1	6.8	2	70	10
7/2	134	2	12.8	2	38	10
7/2	135	1	8.4	2	57	10
7/2	136	2	6.1	19	747	10
7/2	137	1	5.6	2	85	10
7/2	138	2	9.1	20	527	10
7/3	139	1	2.7	24	2133	9
7/3	140	2	3.1	26	2013	9
7/3	141	1	6.9	0	0	9
7/3	142	2	2.7	52	4622	9
7/3	143	1	5.5	14	611	9
7/3	144	2	7.8	2	62	9
7/4	145	1	8.2	4	117	9
7/4	146	2	5.0	2	96	9
7/4	147	1	11.0	11	240	10
7/4	148	2	6.5	10	370	10
7/5	149	1	5.4	41	1822	10
7/5	150	2	3.8	36	2275	10
7/6	151	1	5.8	2	85	9
7/6	152	2	6.0	4	160	9
7/6	153	1	2.7	21	1867	10
7/6	154	2	5.6	33	1414	10
7/7	155	1	5.2	14	646	10
7/7	156	2	3.5	35	2400	10
7/7	157	1	6.7	18	645	10
7/7	158	2	4.7	4	205	10
7/8	159	1	6.1	2	79	10
7/8	160	2	6.3	7	267	10

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Appendix A.2. (p 5 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/8	161	1	10.1	1	24	12
7/8	162	2	13.2	8	145	12
7/9	163	1	6.0	35	1400	11
7/9	164	2	3.5	13	891	11
7/9	165	1	7.1	5	170	11
7/9	166	2	7.2	28	933	11
7/10	167	1	6.6	6	220	9
7/10	168	2	6.1	9	355	9
7/10	169	1	4.3	24	1340	9
7/10	170	2	4.4	46	2510	9
7/11	171	1	7.1	3	101	11
7/11	172	2	6.9	3	104	11
7/11	173	1	6.5	11	406	11
7/11	174	2	6.8	3	106	11
7/12	175	1	6.4	5	190	11
7/12	176	2	4.1	40	2340	11
7/12	177	1	4.2	12	686	11
7/12	178	2	5.6	5	214	11

Appendix A.3. Sockeye salmon test-fishing data, Ugashik River, 1994.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/25	1	1	12.2	0	0	12
6/25	2	2	17	0	0	12
6/25	3	1	15	1	16	12
6/25	4	2	15.1	1	16	12
6/25	5	1	15.7	2	31	12
6/25	6	2	15.8	3	46	12
6/25	7	1	14.7	0	0	12
6/25	8	2	15.8	1	15	12
6/26	9	1	12.8	0	0	11
6/26	10	2	14.4	2	33	11
6/26	11	1	14.4	2	33	11
6/26	12	2	13.4	1	18	11
6/26	13	1	15.7	0	0	11
6/26	14	2	13.8	2	35	11
6/26	15	1	12	1	20	11
6/26	16	2	12.6	2	38	11
6/27	17	1	12	1	20	11
6/27	18	2	10	0	0	11
6/27	19	1	15.1	4	64	11
6/27	20	2	12.8	0	0	11
6/27	21	1	14.7	0	0	12
6/27	22	2	14.7	0	0	12
6/28	23	1	15.1	0	0	11
6/28	24	2	12.1	5	99	11
6/28	25	1	14.5	1	17	11
6/28	26	2	15.8	1	15	11
6/28	27	1	15.4	2	31	11
6/28	28	2	16.2	0	0	11
6/28	29	1	15	0	0	11
6/28	30	2	13	0	0	11
6/29	31	1	15.1	1	16	11
6/29	32	2	12.9	1	19	11
6/29	33	1	13.8	0	0	11
6/29	34	2	14.2	0	0	11
6/29	35	1	12.9	0	0	13
6/29	36	2	11.2	0	0	13
6/29	37	1	12.7	1	19	13
6/29	38	2	13.1	0	0	13
6/30	39	1	13.3	0	0	13
6/30	40	2	13	0	0	13

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Appendix A.3. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/30	41	1	13.8	1	17	13
6/30	42	2	14.7	2	33	13
6/30	43	1	10.6	0	0	15
6/30	44	2	11.2	2	43	15
6/30	45	1	11.1	0	0	15
6/30	46	2	13	1	18	15
7/1	47	1	11.8	1	20	14
7/1	48	2	12.2	0	0	14
7/1	49	1	12.4	0	0	14
7/1	50	2	13.5	1	18	14
7/1	51	1	15.1	1	16	14
7/1	52	2	15.8	0	0	14
7/1	53	1	11.9	1	20	14
7/1	54	2	12.7	2	38	14
7/2	55	1	13.4	2	36	13
7/2	56	2	12.9	3	56	13
7/2	57	1	10.9	0	0	13
7/2	58	2	13.1	0	0	13
7/2	59	1	13.4	0	0	13
7/2	60	2	13.7	2	35	13
7/2	61	1	12.7	1	19	13
7/2	62	2	11.2	1	21	13
7/3	63	1	12.7	0	0	12
7/3	64	2	13.6	0	0	12
7/3	65	1	13.8	0	0	12
7/3	66	2	13.4	1	18	12
7/3	67	1	15	1	16	13
7/3	68	2	13.9	0	0	13
7/3	69	1	10.7	3	67	13
7/3	70	2	12.9	0	0	13
7/4	71	1	12.5	0	0	11
7/4	72	2	11.2	0	0	11
7/4	73	1	12.5	0	0	12
7/4	74	2	11.9	0	0	12
7/5	75	1	11.5	1	21	11
7/5	76	2	12.7	0	0	11
7/5	77	1	13.9	0	0	11
7/5	78	2	13.4	0	0	11
7/5	79	1	14	0	0.7	12
7/5	80	2	10.7	1	22	12

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Appendix A.3. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/5	81	1	13	0	0	12
7/5	82	2	12.4	1	19	12
7/6	83	1	13.1	0	0	12
7/6	84	2	11.4	1	21	12
7/6	85	1	10.7	0	0	12
7/6	86	2	11.7	0	0	12
7/7	87	1	13.7	2	35	15
7/7	88	2	13.8	1	17	15
7/7	89	1	14.6	2	33	15
7/7	90	2	15	0	0	15
7/7	91	1	12.9	0	0	12
7/7	92	2	7.8	7	215	12
7/7	93	1	12.7	2	38	12
7/7	94	2	10.6	10	226	12
7/8	95	1	10	11	264	14
7/8	96	2	9.8	3	73	14
7/8	97	1	9.6	14	350	14
7/8	98	2	9.5	1	25	14
7/8	99	1	12.1	5	99	12
7/8	100	2	8.1	5	148	12
7/8	101	1	12.5	9	173	12
7/8	102	2	11.6	9	186	12
7/9	103	1	6.1	44	1731	12
7/9	104	2	7.5	17	544	12
7/9	105	1	7.8	26	800	12
7/9	106	2	9.6	26	650	12
7/9	107	1	3.8	21	1326	13
7/9	108	2	5.2	61	2815	13
7/10	109	1	4.4	29	1582	12
7/10	110	2	5.7	39	1642	12
7/10	111	1	5.7	23	968	15
7/10	112	2	5.8	48	1986	15
7/11	113	1	5.9	41	1668	13
7/11	114	2	5.4	33	1467	13
7/11	115	1	7.6	17	537	13
7/11	116	2	5.6	29	1243	13
7/12	117	1	6.8	25	882	13
7/12	118	2	7.8	35	1077	13
7/12	119	1	7	5	171	14
7/12	120	2	8.3	17	492	14

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Appendix A.3. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/13	121	1	6.6	32	1164	14
7/13	122	2	6.5	27	997	14
7/13	123	1	8.4	16	457	15
7/13	124	2	7.5	22	704	15
7/14	125	1	7.4	10	324	14
7/14	126	2	8.5	17	480	14
7/14	127	1	9	13	347	15
7/14	128	2	9.5	14	354	15
7/15	129	1	7.3	12	395	13
7/15	130	2	7.8	15	462	13
7/15	131	1	2.8	37	3171	13
7/15	132	2	4.6	1	52	13
7/16	133	1	7.2	11	367	14
7/16	134	2	6.8	9	318	14
7/16	135	1	6.4	13	488	13
7/16	136	2	5.6	6	257	13
7/17	137	1	6.2	9	348	12
7/17	138	2	5.7	8	337	12
7/17	139	1	3.8	11	695	12
7/17	140	2	4.3	8	447	12

Appendix A.4. Sockeye salmon test-fishing data, Igushik River, 1994.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/17	1	1	16.0	0	0	-
6/17	2	2	16.3	0	0	-
6/17	3	1	15.5	0	0	-
6/17	4	2	15.4	0	0	-
6/18	5	1	15.1	0	0	14
6/18	6	2	16.9	0	0	14
6/18	7	1	16.0	0	0	14
6/18	8	2	17.8	1	15	14
6/18	9	1	15.4	0	0	15
6/18	10	2	15.9	0	0	15
6/18	11	1	15.4	0	0	15
6/18	12	2	15.1	0	0	15
6/19	13	1	15.8	0	0	15
6/19	14	2	15.4	0	0	15
6/19	15	1	15.3	0	0	15
6/19	16	2	14.9	0	0	15
6/20	17	1	15.5	0	0	14
6/20	18	2	15.8	0	0	14
6/20	19	1	15.4	0	0	14
6/20	20	2	16.1	0	0	14
6/20	21	1	15.3	0	0	15
6/20	22	2	17.5	0	0	15
6/20	23	1	15.1	0	0	15
6/20	24	2	15.1	0	0	15
6/21	25	1	15.4	0	0	15
6/21	26	2	15.6	0	0	15
6/21	27	1	15.4	0	0	15
6/21	28	2	15.4	0	0	15
6/21	29	1	15.5	0	0	14
6/21	30	2	15.9	2	30	14
6/21	31	1	17.3	1	15	14
6/21	32	2	17.0	3	45	14
6/22	33	1	15.3	0	0	14
6/22	34	2	15.5	0	0	14
6/22	35	1	15.4	0	0	14
6/22	36	2	15.1	0	0	14
6/22	37	1	15.3	0	0	13
6/22	38	2	15.9	0	0	13
6/22	39	1	15.6	0	0	13
6/22	40	2	16.3	0	0	13

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## Appendix A.4. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/23	41	1	15.4	0	0	13
6/23	42	2	15.7	0	0	13
6/23	43	1	15.5	0	0	13
6/23	44	2	15.5	0	0	13
6/23	45	1	15.5	0	0	13
6/23	46	2	16.1	0	0	13
6/23	47	1	15.1	0	0	13
6/23	48	2	15.6	0	0	13
6/24	49	1	10.1	0	0	13
6/24	50	2	15.0	0	0	13
6/24	51	1	15.8	0	0	13
6/24	52	2	14.0	0	0	13
6/24	53	1	15.4	0	0	13
6/24	54	2	16.0	2	30	13
6/24	55	1	15.3	0	0	13
6/24	56	2	15.1	0	0	13
6/25	57	1	15.6	0	0	12
6/25	58	2	15.0	0	0	12
6/25	59	1	15.3	1	15	12
6/25	60	2	15.3	0	0	12
6/25	61	1	15.4	0	0	12
6/25	62	2	15.4	1	15	12
6/25	63	1	15.4	0	0	12
6/25	64	2	15.6	1	15	12
6/26	65	1	15.4	0	0	11
6/26	66	2	15.4	0	0	11
6/26	67	1	15.9	0	0	11
6/26	68	2	15.3	0	0	11
6/26	69	1	15.5	0	0	12
6/26	70	2	15.6	0	0	12
6/26	71	1	15.5	1	15	12
6/26	72	2	15.8	0	0	12
6/27	73	1	15.1	0	0	12
6/27	74	2	15.4	0	0	12
6/27	75	1	15.0	0	0	12
6/27	76	2	15.3	0	0	12
6/27	77	1	15.9	0	0	13
6/27	78	2	15.3	1	15	13
6/27	79	1	15.3	0	0	13
6/27	80	2	15.9	4	60	13

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Appendix A.4. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/28	81	1	15.9	0	0	12
6/28	82	2	15.9	0	0	12
6/28	83	1	15.4	0	0	12
6/28	84	2	16.0	0	0	12
6/28	85	1	15.4	0	0	13
6/28	86	2	15.4	0	0	13
6/28	87	1	16.1	0	0	13
6/28	88	2	16.5	0	0	13
6/29	89	1	15.1	0	0	13
6/29	90	2	15.9	0	0	13
6/29	91	1	15.3	0	0	13
6/29	92	2	15.5	0	0	13
6/29	93	1	15.3	0	0	13
6/29	94	2	15.6	0	0	13
6/29	95	1	15.3	0	0	13
6/29	96	2	15.3	0	0	13
6/30	97	1	17.0	0	0	13
6/30	98	2	15.0	0	0	13
6/30	99	1	15.9	1	15	13
6/30	100	2	15.4	0	0	13
6/30	101	1	15.3	0	0	13
6/30	102	2	15.5	0	0	13
6/30	103	1	15.4	0	0	13
6/30	104	2	15.6	0	0	13
7/1	105	1	15.1	0	0	14
7/1	106	2	15.6	1	15	14
7/1	107	1	15.0	2	30	14
7/1	108	2	15.9	1	15	14
7/1	109	1	15.6	1	15	13
7/1	110	2	15.4	7	110	13
7/1	111	1	16.1	2	30	13
7/1	112	2	15.3	4	65	13
7/2	113	1	15.3	0	0	13
7/2	114	2	6.1	24	940	13
7/2	115	1	15.1	1	15	13
7/2	116	2	15.6	10	155	13
7/3	117	1	15.4	0	0	13
7/3	118	2	15.6	3	45	13
7/3	119	1	15.4	0	0	13
7/3	120	2	15.0	14	225	13

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Appendix A.4. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/3	121	1	15.3	2	30	12
7/3	122	2	15.8	1	15	12
7/3	123	1	15.4	1	15	12
7/3	124	2	15.4	3	45	12
7/4	125	1	15.2	0	0	13
7/4	126	2	15.4	0	0	13
7/4	127	1	15.3	0	0	13
7/4	128	2	15.4	0	0	13
7/4	129	1	15.5	2	30	13
7/4	130	2	15.5	3	45	13
7/4	131	1	15.5	6	95	13
7/4	132	2	16.0	9	135	13
7/5	133	1	15.4	0	0	12
7/5	134	2	15.9	1	15	12
7/5	135	1	15.4	0	0	12
7/5	136	2	15.3	0	0	12
7/5	137	1	15.5	0	0	13
7/5	138	2	15.6	2	30	13
7/5	139	1	15.3	1	15	13
7/5	140	2	15.3	3	45	13
7/6	141	1	15.9	0	0	12
7/6	142	2	16.0	0	0	12
7/6	143	1	15.8	0	0	12
7/6	144	2	15.5	0	0	12
7/6	145	1	15.5	0	0	13
7/6	146	2	15.5	2	30	13
7/6	147	1	15.5	0	0	13
7/6	148	2	15.6	0	0	13
7/7	149	1	15.3	0	0	12
7/7	150	2	15.3	0	0	12
7/7	151	1	15.6	0	0	12
7/7	152	2	15.6	1	15	12
7/7	153	1	15.6	1	15	13
7/7	154	2	15.5	0	0	13
7/7	155	1	15.5	1	15	13
7/7	156	2	15.1	1	15	13
7/8	157	1	15.4	0	0	12
7/8	158	2	15.3	0	0	12
7/8	159	1	15.5	0	0	12
7/8	160	2	15.3	0	0	12

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Appendix A.4. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/8	161	1	15.3	5	80	13
7/8	162	2	15.4	14	220	13
7/8	163	1	15.1	15	240	13
7/8	164	2	5.3	23	1050	13
7/9	165	1	15.3	3	45	13
7/9	166	2	15.9	4	60	13
7/9	167	1	15.4	4	60	13
7/9	168	2	9.0	19	505	13
7/9	169	1	4.9	45	2215	-
7/9	170	2	6.0	33	1320	-
7/9	171	1	2.0	16	1920	-
7/9	172	2	3.3	37	2730	-
7/10	173	1	15.5	8	125	13
7/10	174	2	4.4	15	825	13
7/10	175	1	15.3	11	175	13
7/10	176	2	13.0	37	685	13
7/10	177	1	15.1	22	350	13
7/10	178	2	15.8	1	15	13
7/10	179	1	15.4	34	1520	13
7/11	180	2	15.5	0	0	12
7/11	181	1	15.4	1	15	12
7/11	182	2	15.5	3	45	12
7/11	183	1	15.1	3	50	12
7/11	184	2	15.6	15	230	13
7/11	185	1	10.6	25	565	13
7/11	186	2	16.1	1	15	13
7/11	187	1	15.3	10	155	13
7/11	188	2	15.4	3	45	13
7/12	189	1	15.3	0	0	13
7/12	190	2	15.9	0	0	13
7/12	191	1	15.4	8	125	13
7/12	192	2	16.6	2	30	13
7/12	193	1	15.4	9	140	14
7/12	194	2	15.6	2	30	14
7/12	195	1	15.9	3	45	14
7/12	196	2	15.8	2	30	14
7/13	197	1	15.6	0	0	14
7/13	198	2	16.1	0	0	14
7/13	199	1	15.8	2	30	14
7/13	200	2	15.5	4	60	14

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Appendix A.4. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/13	201	1	15.5	5	75	15
7/13	202	2	15.9	0	0	15
7/13	203	1	15.3	1	15	15
7/13	204	2	15.5	0	0	15

Appendix B.1. Sockeye salmon test-fishing data, Kvichak River, 1995.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/21	1	1	9.8	0	0	13
6/21	2	2	10.8	0	0	13
6/21	3	1	8.8	0	0	13
6/21	4	2	9.5	0	0	13
6/21	5	1	9.3	0	0	12
6/21	6	1	9.8	0	0	12
6/21	7	2	9.5	0	0	12
6/21	8	2	9.3	0	0	12
6/22	9	1	8.8	0	0	13
6/22	10	1	10.5	0	0	13
6/22	11	2	8.5	0	0	13
6/22	12	2	10.5	0	0	13
6/23	13	1	10.0	0	0	13
6/23	14	1	10.3	0	0	13
6/23	15	2	9.5	0	0	13
6/23	16	2	9.5	0	0	13
6/23	17	1	9.0	0	0	13
6/23	18	1	8.2	0	0	13
6/23	19	2	8.5	1	28	13
6/23	20	2	8.2	0	0	13
6/24	21	1	8.8	0	0	13
6/24	22	1	9.0	0	0	13
6/24	23	2	7.5	0	0	13
6/24	24	2	9.2	0	0	13
6/24	25	1	8.5	0	0	13
6/24	26	1	8.0	0	0	13
6/24	27	2	9.0	2	53	13
6/24	28	2	8.8	0	0	13
6/25	29	1	8.8	0	0	13
6/25	30	1	8.5	0	0	13
6/25	31	2	6.5	26	960	13
6/25	32	2	2.8	28	2400	13
6/25	33	1	4.2	15	857	13
6/25	34	2	1.2	76	15200	13
6/26	35	1	1.2	30	6000	13
6/26	36	2	2.0	38	4560	13
6/26	37	1	2.5	23	2208	13
6/26	38	2	1.8	66	8800	13
6/27	39	1	9.0	0	0	12
6/27	40	2	3.0	29	2320	12

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## Appendix B.1. (p 2 of 3)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/27	41	1	8.5	8	226	12
6/27	42	2	4.5	25	1333	12
6/28	43	1	7.3	0	0	12
6/28	44	2	8.8	0	0	12
6/28	45	1	8.5	6	169	11
6/28	46	2	9.0	0	0	11
6/29	47	1	3.0	23	1840	12
6/29	48	2	3.8	33	2084	12
6/29	49	1	5.3	64	2898	11
6/29	50	2	1.5	53	8480	11
6/30	51	1	1.8	18	2400	11
6/30	52	2	1.5	23	3680	11
6/30	53	1	1.0	30	7200	12
6/30	54	2	0.8	31	9300	12
7/1	55	1	8.8	6	165	12
7/1	56	2	8.8	15	409	12
7/1	57	1	9.0	16	427	12
7/1	58	2	3.8	64	4042	12
7/2	59	1	8.8	4	110	12
7/2	60	2	9.0	17	453	12
7/2	61	1	9.5	0	0	14
7/2	62	2	2.3	74	7722	14
7/3	63	1	8.0	1	30	13
7/3	64	2	7.5	10	320	13
7/3	65	1	9.3	0	0	15
7/3	66	2	3.0	49	3920	15
7/4	67	1	8.0	22	660	13
7/4	68	2	3.8	98	6190	13
7/4	69	1	2.0	32	3840	15
7/4	70	2	2.0	54	6480	15
7/5	71	1	6.0	23	920	14
7/5	72	2	1.3	83	15323	14
7/5	73	1	2.0	30	3600	14
7/5	74	2	1.8	93	12400	14
7/6	75	1	4.3	48	2679	14
7/6	76	2	2.3	98	10226	14
7/6	77	1	9.3	21	542	14
7/6	78	2	3.0	65	5200	14
7/7	79	1	2.0	46	5520	13
7/7	80	2	2.0	44	5280	13

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Appendix B.1. (p 3 of 3)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/7	81	1	8.5	19	536	14
7/7	82	2	1.5	91	14560	14
7/8	83	1	8.8	25	682	13
7/8	84	2	4.8	107	5350	13
7/9	85	1	9.0	4	107	14
7/9	86	2	7.8	41	1262	14
7/9	87	1	8.5	0	0	14
7/9	88	2	4.8	49	2450	14
7/10	89	1	7.8	7	215	14
7/10	90	2	10.0	14	336	14
7/10	91	1	8.5	11	311	14
7/10	92	2	8.8	85	2318	14
7/11	93	1	8.5	38	1073	13
7/11	94	2	8.5	17	480	13
7/11	95	1	8.3	35	1012	14
7/11	96	2	7.3	78	2564	14
7/12	97	1	8.5	48	1355	14
7/12	98	2	9.5	40	1011	14
7/12	99	1	7.3	32	1052	14
7/12	100	2	7.3	63	2071	14
7/13	101	1	7.8	27	831	13
7/13	102	2	8.8	24	655	13
7/13	103	1	4.8	68	3400	14
7/13	104	2	2.8	83	7114	14
7/14	105	1	7.5	28	896	14
7/14	106	2	4.8	17	850	14
7/14	107	1	9.3	6	155	14
7/14	108	2	7.8	43	1323	14
7/15	109	1	7.8	19	585	14
7/15	110	2	8.0	16	480	14
7/15	111	1	7.0	12	411	14
7/15	112	2	7.5	19	608	14
7/16	113	1	7.0	40	1371	14
7/16	114	2	7.5	18	576	14
7/16	115	1	7.3	26	855	14
7/16	116	2	7.0	14	480	14
7/17	117	1	7.5	68	2176	14
7/17	118	2	7.3	17	559	14
7/17	119	1	8.5	32	904	14
7/17	120	2	7.5	54	1728	14
7/18	121	1	7.5	47	1504	13
7/18	122	2	7.8	31	954	13
7/18	123	1	6.5	16	591	13
7/18	124	2	3.5	51	3497	13



Appendix B.2. Sockeye salmon test-fishing data, Egegik River, 1995.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/16	1	1	8.4	0	0	12
6/16	2	2	5.4	0	0	12
6/16	3	1	8.8	0	0	12
6/16	4	2	5.8	0	0	12
6/16	5	1	7.1	4	135	12
6/16	6	2	8.3	5	145	12
6/16	7	1	7.5	0	0	12
6/16	8	2	8.8	0	0	12
6/17	9	1	8.0	0	0	12
6/17	10	2	7.9	2	61	12
6/17	11	1	8.0	0	0	12
6/17	12	2	8.0	1	30	12
6/17	13	1	6.3	25	952	12
6/17	14	2	5.3	22	996	12
6/17	15	1	8.8	1	27	12
6/17	16	2	6.3	17	648	12
6/18	17	1	6.4	2	75	11
6/18	18	2	8.0	6	180	11
6/18	19	1	7.0	2	69	11
6/18	20	2	7.0	5	171	11
6/18	21	1	6.8	7	247	12
6/18	22	2	6.8	3	106	12
6/18	23	1	5.9	1	41	12
6/18	24	2	6.5	27	997	12
6/19	25	1	6.3	0	0	10
6/19	26	2	7.8	18	554	10
6/19	27	1	7.6	5	158	10
6/19	28	2	8.3	17	492	10
6/19	29	1	7.5	3	96	10
6/19	30	2	8.0	8	240	10
6/19	31	1	7.1	3	101	10
6/19	32	2	5.9	1	41	10
6/20	33	1	6.9	0	0	10
6/20	34	2	8.4	11	314	10
6/20	35	1	7.0	2	69	10
6/20	36	2	7.4	2	65	10
6/20	37	1	8.0	6	180	10
6/20	38	2	6.8	29	1024	10
6/20	39	1	9.5	1	25	10
6/20	40	2	9.5	10	253	10

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Appendix B.2. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/21	41	1	7.5	19	608	11
6/21	42	2	4.8	39	1950	11
6/21	43	1	5.9	2	81	11
6/21	44	2	8.1	18	533	11
6/21	45	1	7.6	1	32	11
6/21	46	2	7.6	4	126	11
6/21	47	1	7.5	1	32	11
6/21	48	2	7.5	2	64	11
6/22	49	1	8.4	0	0	11
6/22	50	2	7.8	21	646	11
6/22	51	1	7.0	0	0	11
6/22	52	2	8.0	6	180	11
6/22	53	1	8.3	6	173	11
6/22	54	2	7.6	2	63	11
6/22	55	1	7.8	0	0	11
6/22	56	2	6.0	5	200	11
6/23	57	1	7.5	0	0	11
6/23	58	2	8.1	38	1126	11
6/23	59	1	7.9	1	30	10
6/23	60	2	5.8	8	331	10
6/24	61	1	6.5	0	0	9
6/24	62	2	8.9	4	108	9
6/24	63	1	7.0	3	103	9
6/24	64	2	6.3	2	76	9
6/24	65	1	7.5	26	832	9
6/24	66	2	10.8	28	622	9
6/24	67	1	4.9	1	49	9
6/24	68	2	6.4	0	0	9
6/24	69	2	8.0	25	750	9
6/25	70	1	5.6	2	86	9
6/25	71	2	7.5	15	608	9
6/25	72	1	7.1	4	135	9
6/25	73	2	4.0	10	600	9
6/25	74	1	3.6	15	1000	9
6/25	75	2	2.9	47	3890	9
6/25	76	1	5.6	1	43	9
6/25	77	2	9.4	6	153	9
6/26	78	1	6.3	2	76	11
6/26	79	2	1.9	15	1895	11
6/26	80	1	1.7	8	1129	11

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## Appendix B.2. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/26	81	2	7.5	13	416	11
6/26	82	1	5.1	29	1365	11
6/26	83	2	7.1	64	2163	11
6/26	84	1	6.6	14	509	11
6/26	85	2	4.2	20	1143	11
6/27	86	1	6.3	9	343	12
6/27	87	2	6.5	31	1145	12
6/27	88	1	6.6	7	255	12
6/27	89	2	3.6	36	2400	12
6/28	90	1	6.0	23	920	11
6/28	91	2	6.3	69	2629	11
6/28	92	1	4.1	29	1698	11
6/28	93	2	4.0	29	1740	11
6/28	94	1	5.0	19	912	11
6/28	95	2	5.0	25	1200	11
6/29	96	1	3.9	0	0	11
6/29	97	2	3.8	1	63	11
6/29	98	1	6.9	1	35	11
6/29	99	2	5.6	2	86	11
6/29	100	1	8.9	7	189	11
6/29	101	2	5.5	18	785	11
6/30	102	1	6.0	23	920	11
6/30	103	2	4.0	20	1200	11
6/30	104	1	8.4	12	343	11
6/30	105	2	9.7	52	1287	11
7/1	106	1	7.0	1	34	11
7/1	107	2	8.3	20	581	11
7/1	108	1	6.2	0	0	11
7/1	109	2	7.8	6	185	11
7/2	110	1	6.6	0	0	12
7/2	111	2	4.5	2	107	12
7/2	112	1	8.6	0	0	12
7/2	113	2	6.5	3	110	12
7/3	114	1	7.7	12	374	13
7/3	115	2	5.5	9	393	13
7/3	116	1	7.3	15	493	13
7/3	117	2	8.1	1	30	13
7/4	118	1	5.7	13	547	13
7/4	119	2	4.6	47	2452	13
7/4	120	1	5.0	17	816	14

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Appendix B.2. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/4	121	2	5.8	5	207	14
7/5	122	1	7.5	0	0	14
7/5	123	2	5.9	4	163	14
7/5	124	1	5.8	0	0	14
7/5	125	2	7.5	2	64	14
7/6	126	1	9.0	0	0	12
7/6	127	2	8.0	1	30	12
7/6	128	1	7.3	6	197	11
7/7	129	1	15.5	3	46	11
7/7	130	2	5.1	22	1035	11
7/7	131	1	8.0	1	30	11
7/7	132	2	5.2	6	277	11
7/8	133	1	9.9	4	97	11
7/8	134	2	6.1	31	1220	11
7/8	135	1	8.4	5	143	13
7/8	136	2	4.8	19	950	13
7/9	137	1	7.4	3	97	13
7/9	138	2	4.7	7	357	13
7/9	139	1	5.3	1	45	12
7/9	140	2	8.0	12	360	12
7/10	141	1	5.1	0	0	12
7/10	142	2	4.9	2	98	12
7/11	143	1	7.3	3	99	13
7/11	144	2	4.3	5	279	13
7/11	145	1	11.5	7	146	13
7/11	146	2	3.9	28	1723	13
7/12	147	1	8.4	2	57	13
7/12	148	2	6.8	5	176	13
7/12	149	1	5.6	5	214	13
7/12	150	2	4.0	20	1200	13

Appendix B.3. Sockeye salmon test-fishing data, Ugashik River, 1995.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/24	1	1	12.7	0	0	9
6/24	2	2	15.1	1	16	9
6/24	3	1	15.7	0	0	10
6/24	4	2	15.2	1	16	10
6/25	5	1	16.4	0	0	10
6/25	6	2	17.2	0	0	10
6/25	7	1	17.3	1	15	10
6/25	8	2	14.3	0	0	10
6/25	9	1	13.6	0	0	10
6/25	10	2	12.2	0	0	10
6/25	11	1	19.7	0	0	10
6/25	12	2	12.3	1	20	10
6/26	13	1	15.7	1	15	11
6/26	14	2	17.0	0	0	11
6/26	15	1	14.9	0	0	11
6/26	16	2	15.8	0	0	11
6/26	17	1	15.8	0	0	11
6/26	18	2	13.9	1	17	11
6/26	19	1	13.5	0	0	11
6/26	20	2	14.7	0	0	11
6/27	21	1	13.6	0	0	12
6/27	22	2	16.2	0	0	12
6/27	23	1	14.1	1	17	12
6/27	24	2	15.7	0	0	12
6/27	25	1	13.1	0	0	11
6/27	26	2	12.5	0	0	11
6/27	27	1	11.2	0	0	11
6/27	28	2	12.3	0	0	11
6/28	29	1	10.6	0	0	10
6/28	30	2	14.4	0	0	10
6/28	31	1	15.0	0	0	10
6/28	32	2	16.7	1	14	10
6/28	33	1	11.0	0	0	10
6/28	34	2	10.7	1	22	10
6/28	35	1	7.5	0	0	10
6/28	36	2	6.6	0	0	10
6/29	37	1	11.5	0	0	12
6/29	38	2	13.7	2	35	12
6/29	39	1	14.7	0	0	12
6/29	40	2	13.3	0	0	12

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Appendix B.3. (p 2 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/29	41	1	12.6	3	57	11
6/29	42	2	13.4	4	72	11
6/29	43	1	12.6	3	57	11
6/29	44	2	10.0	0	0	11
6/30	45	1	12.8	0	0	12
6/30	46	2	13.8	2	35	12
6/30	47	1	15.7	0	0	12
6/30	48	2	15.1	1	16	12
6/30	49	1	15.6	4	62	12
6/30	50	2	15.5	7	108	12
6/30	51	1	15.5	3	46	13
6/30	52	2	13.4	13	233	13
6/30	53	1	12.5	2	38	13
6/30	54	2	15.0	8	128	13
6/30	55	1	14.4	5	83	13
6/30	56	2	11.4	3	63	13
7/1	57	1	12.7	17	321	12
7/1	58	2	14.1	20	340	12
7/1	59	1	10.7	13	292	12
7/1	60	2	11.1	10	216	12
7/2	61	1	12.8	15	281	12
7/2	62	2	11.5	15	313	12
7/2	63	1	13.0	4	74	12
7/2	64	2	14.5	12	199	12
7/2	65	1	15.8	19	289	14
7/2	66	2	15.5	10	155	14
7/2	67	1	12.5	18	346	14
7/2	68	2	11.8	8	163	14
7/3	69	1	12.3	9	176	12
7/3	70	2	14.4	20	333	12
7/3	71	1	16.6	7	101	12
7/3	72	2	15.0	21	336	12
7/3	73	1	14.4	8	133	12
7/3	74	2	14.1	11	187	12
7/3	75	1	12.5	6	115	12
7/3	76	2	15.7	5	76	12
7/4	77	1	16.0	5	75	12
7/4	78	2	16.0	14	210	12
7/4	79	1	18.2	4	53	12
7/4	80	2	19.3	19	236	12

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Appendix B.3. (p 3 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/4	81	1	12.3	19	371	12
7/4	82	2	12.5	11	211	12
7/4	83	1	13.4	38	681.7	12
7/4	84	2	12.3	24	468	12
7/5	85	1	13.6	12	212	12
7/5	86	2	13.6	15	265	12
7/5	87	1	15.1	18	286	12
7/5	88	2	13.0	12	222	12
7/5	89	1	9.5	21	531	13
7/5	90	2	4.3	35	1953	13
7/5	91	1	7.7	11	343	13
7/5	92	2	4.6	14	730	13
7/6	93	1	8.7	15	414	12
7/6	94	2	11.4	27	568	12
7/6	95	1	10.3	21	489	12
7/6	96	2	6.8	14	494	12
7/6	97	1	12.5	13	269	12
7/6	98	2	10.8	16	356	12
7/6	99	1	9.4	25	638	12
7/6	100	2	6.9	16	557	12
7/7	101	1	8.7	11	303	12
7/7	102	2	9.0	4	107	12
7/7	103	1	11.0	11	240	12
7/7	104	2	12.7	10	189	12
7/7	105	1	8.5	8	226	12
7/7	106	2	14.6	2	33	12
7/7	107	1	8.8	15	409	12
7/7	108	2	13.6	4	71	12
7/8	109	1	12.4	4	77	12
7/8	110	2	18.4	6	78	12
7/8	111	1	15.6	3	46	12
7/8	112	2	11.8	8	163	12
7/8	113	1	13.9	5	86	12
7/8	114	2	10.5	6	137	12
7/8	115	1	10.5	13	297	12
7/8	116	2	11.5	6	125	12
7/9	117	1	14.3	14	235	12
7/9	118	2	14.3	12	201	12
7/9	119	1	10.3	8	186	12
7/9	120	2	8.1	7	207	12

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Appendix B.3. (p 4 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/10	121	1	8.2	19	556	12
7/10	122	2	6.3	13	495	12
7/10	123	1	8.6	18	502	12
7/10	124	2	8.4	23	657	12
7/10	125	1	6.4	10	375	13
7/10	126	2	3.9	23	1415	13
7/10	127	1	4.4	10	545	13
7/10	128	2	4.5	23	1227	13
7/11	129	1	7.3	9	296	13
7/11	130	2	6.9	10	348	13
7/11	131	1	6.4	14	525	13
7/11	132	2	7.4	11	357	13
7/11	133	1	7.8	7	215	12
7/11	134	2	5.5	9	393	12
7/11	135	1	7.8	10	308	12
7/11	136	2	7.8	17	528	12
7/12	137	1	8.9	8	216	14
7/12	138	2	10.6	1	23	14
7/12	139	1	9.7	6	148	14
7/12	140	2	10.5	1	23	14
7/12	141	1	10.6	8	181	13
7/12	142	2	8.5	15	424	13
7/12	143	1	10.2	12	282	13
7/12	144	2	10.0	12	288	13
7/13	145	1	9.2	8	209	13
7/13	146	2	10.5	5	114	13
7/13	147	1	8.6	4	112	13
7/13	148	2	10.1	0	0	13
7/13	149	1	11.7	3	62	12
7/13	150	2	9.4	9	230	12
7/13	151	1	11.9	6	121	12
7/13	152	2	11.0	14	305	12
7/14	153	1	10.4	10	231	13
7/14	154	2	9.5	8	202	13
7/14	155	1	10.2	7	165	13
7/14	156	2	11.7	5	103	13
7/14	157	1	9.4	7	179	13
7/14	158	2	8.6	11	307	13
7/14	159	1	9.7	6	148	13
7/14	160	2	9.6	9	225	13

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Appendix B.3. (p 5 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/15	161	1	12.0	10	200	13
7/15	162	2	9.2	6	157	13
7/15	163	1	9.1	8	211	13
7/15	164	2	10.2	12	282	13
7/15	165	1	4.4	21	1145	13
7/15	166	2	4.8	36	1800	13
7/16	167	1	6.0	38	1520	13
7/16	168	2	2.9	18	1490	13
7/16	169	1	2.7	37	3289	12
7/16	170	2	2.5	32	3072	12
7/17	171	1	3.5	29	1989	12
7/17	172	2	3.3	28	2036	12
7/17	173	1	3.4	33	2329	12
7/17	174	2	3.3	47	3418	12
7/18	175	1	7.4	53	1719	13
7/18	176	2	4.8	59	2950	13
7/18	177	1	2.2	65	7091	13
7/18	178	2	2.0	41	4920	13
7/19	179	1	4.4	35	1909	13
7/19	180	2	2.8	26	2229	13
7/19	181	1	2.8	36	3086	13
7/19	182	2	3.6	15	1000	13

Appendix B.4. Sockeye salmon test-fishing data, Igushik River, 1995.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/18	1	1	15.1	0	0	14
6/18	2	2	15.4	0	0	14
6/18	3	1	15.4	0	0	14
6/18	4	2	15.3	0	0	14
6/19	5	1	15.1	1	15	14
6/19	6	2	15.5	0	0	14
6/19	7	1	15.4	0	0	14
6/19	8	2	15.0	0	0	14
6/19	9	1	12.4	0	0	13
6/19	10	2	12.4	0	0	13
6/20	11	1	15.4	0	0	13
6/20	12	2	15.4	0	0	13
6/20	13	1	15.4	1	15	13
6/20	14	2	15.6	0	0	13
6/20	15	1	14.9	0	0	14
6/20	16	2	15.3	0	0	14
6/20	17	1	15.1	0	0	14
6/20	18	2	15.3	0	0	14
6/21	19	1	15.8	0	0	13
6/21	20	2	15.3	0	0	13
6/21	21	1	15.5	0	0	13
6/21	22	2	15.3	0	0	13
6/21	23	1	15.3	0	0	13
6/21	24	2	15.5	0	0	13
6/21	25	1	15.4	1	15	13
6/21	26	2	15.3	0	0	13
6/22	27	1	15.9	0	0	13
6/22	28	2	15.3	0	0	13
6/22	29	1	15.1	0	0	13
6/22	30	2	15.3	0	0	13
6/22	31	1	15.3	0	0	15
6/22	32	2	15.9	0	0	15
6/22	33	1	15.3	0	0	15
6/22	34	2	14.9	0	0	15
6/23	35	1	15.1	0	0	14
6/23	36	2	15.6	0	0	14
6/23	37	1	15.3	0	0	14
6/23	38	2	15.3	1	15	14
6/24	39	1	15.1	0	0	14
6/24	40	2	15.1	0	0	14

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## Appendix B.4. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/24	41	1	15.3	0	0	14
6/24	42	2	15.1	0	0	14
6/24	43	1	15.4	3	45	14
6/24	44	2	15.4	2	30	14
6/24	45	1	15.4	1	15	14
6/24	46	2	15.8	9	135	14
6/25	47	1	15.3	0	0	14
6/25	48	2	15.0	0	0	14
6/25	49	1	15.4	0	0	14
6/25	50	2	15.9	0	0	14
6/25	51	1	15.3	0	0	15
6/25	52	2	15.1	36	570	15
6/25	53	1	15.4	3	45	15
6/25	54	2	15.8	100	1525	15
6/26	55	1	15.3	0	0	14
6/26	56	2	15.3	0	0	14
6/26	57	1	15.4	0	0	14
6/26	58	2	15.1	0	0	14
6/26	59	1	4.6	22	1140	15
6/26	60	2	15.5	0	0	15
6/26	61	1	15.4	10	155	15
6/26	62	2	15.4	0	0	15
6/27	63	1	15.3	0	0	14
6/27	64	2	15.4	0	0	14
6/27	65	1	16.0	2	30	14
6/27	66	2	15.3	0	0	14
6/27	67	1	13.0	11	205	15
6/27	68	2	14.6	0	0	15
6/27	69	1	10.5	36	825	15
6/27	70	2	15.9	0	0	15
6/28	71	1	15.3	1	15	14
6/28	72	2	15.3	0	0	14
6/28	73	1	15.4	3	45	14
6/28	74	2	15.4	0	0	14
6/28	75	1	2.9	29	2420	13
6/28	76	2	15.9	2	30	13
6/28	77	1	2.0	17	2040	13
6/28	78	2	16.1	1	15	13
6/29	79	1	15.3	4	65	13
6/29	80	2	15.5	23	355	13

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## Appendix B.4. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/29	81	1	15.5	16	250	13
6/29	82	2	15.5	0	0	13
6/29	83	1	4.6	50	2595	14
6/29	84	2	15.5	1	15	14
6/29	85	1	3.8	74	4735	14
6/29	86	2	15.0	13	210	14
6/30	87	1	15.4	11	170	13
6/30	88	2	15.4	2	30	13
6/30	89	1	15.3	0	0	13
6/30	90	2	15.4	0	0	13
6/30	91	1	5.4	25	1115	14
6/30	92	2	15.6	0	0	14
6/30	93	1	5.6	29	1235	14
6/30	94	2	15.5	4	60	14
7/1	95	1	15.3	0	0	14
7/1	96	2	15.5	0	0	14
7/1	97	1	15.9	3	45	14
7/1	98	2	15.4	0	0	14
7/1	99	1	15.3	18	285	14
7/1	100	2	15.6	0	0	14
7/1	101	1	15.1	21	335	14
7/1	102	2	15.9	4	60	14
7/2	103	1	15.4	1	15	14
7/2	104	2	15.6	1	15	14
7/2	105	1	15.5	0	0	14
7/2	106	2	15.4	0	0	14
7/2	107	1	15.4	2	30	15
7/2	108	2	15.0	2	30	15
7/2	109	1	15.4	2	30	15
7/2	110	2	15.9	3	45	15
7/3	111	1	15.3	0	0	14
7/3	112	2	15.4	0	0	14
7/3	113	1	15.6	0	0	14
7/3	114	2	15.4	0	0	14
7/3	115	1	15.4	3	45	16
7/3	116	2	15.4	3	45	16
7/3	117	1	15.5	7	110	16
7/3	118	2	15.6	2	30	16
7/4	119	1	15.3	0	0	14
7/4	120	2	15.4	0	0	14

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Appendix B.4. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/4	121	1	15.3	0	0	14
7/4	122	2	15.3	1	15	14
7/4	123	1	15.5	2	30	15
7/4	124	2	15.8	4	60	15
7/4	125	1	15.1	0	0	15
7/4	126	2	17.5	2	25	15
7/5	127	1	15.0	4	65	15
7/5	128	2	15.4	0	0	15
7/5	129	1	15.3	3	45	15
7/5	130	2	15.4	2	30	15
7/5	131	1	15.3	1	15	16
7/5	132	2	15.4	0	0	16
7/5	133	1	15.8	2	30	16
7/5	134	2	15.6	0	0	16
7/6	135	1	15.4	22	345	16
7/6	136	2	15.5	1	15	16
7/6	137	1	15.4	28	435	16
7/6	138	2	15.3	1	15	16
7/6	139	1	15.5	8	125	14
7/6	140	2	15.4	0	0	14
7/6	141	1	15.4	3	45	14
7/6	142	2	15.4	0	0	14
7/7	143	1	15.5	18	280	14
7/7	144	2	15.5	30	465	14
7/7	145	1	15.4	3	45	14
7/7	146	2	8.5	67	1890	14
7/7	147	1	15.4	1	15	14
7/7	148	2	3.9	29	1795	14
7/7	149	1	15.3	2	30	14
7/7	150	2	4.0	22	1320	14
7/8	151	1	15.4	6	95	14
7/8	152	2	15.4	2	30	14
7/8	153	1	15.4	7	110	15
7/8	154	2	15.3	0	0	15

Appendix C.1. Sockeye salmon test-fishing data, Kvichak River, 1996.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/21	1	1	10.3	0	0	-
6/21	2	2	10.3	0	0	-
6/21	3	1	8.5	0	0	-
6/21	4	2	5.0	0	0	-
6/21	5	1	9.3	0	0	-
6/21	6	2	10.5	0	0	-
6/22	7	1	9.3	0	0	14
6/22	8	2	8.8	0	0	14
6/22	9	1	8.0	0	0	14
6/22	10	2	8.8	0	0	14
6/22	11	1	7.3	0	0	14
6/22	12	2	10.7	0	0	14
6/22	13	1	8.8	0	0	14
6/22	14	2	10.0	1	24	14
6/23	15	1	10.8	0	0	14
6/23	16	2	9.3	0	0	14
6/23	17	1	8.0	0	0	14
6/23	18	2	8.0	0	0	14
6/23	19	1	8.2	0	0	14
6/23	20	2	10.2	1	23	14
6/23	21	1	7.8	0	0	14
6/23	22	2	10.0	1	24	14
6/24	23	1	8.5	0	0	14
6/24	24	2	7.5	15	480	14
6/24	25	1	7.8	0	0	14
6/24	26	2	8.2	2	58	14
6/24	27	1	9.5	3	76	13
6/24	28	2	8.2	8	233	13
6/24	29	1	9.8	2	49	13
6/24	30	2	7.5	5	160	13
6/25	31	1	11.8	2	41	12
6/25	32	2	8.3	0	0	12
6/25	33	1	8.3	2	58	12
6/25	34	2	9.0	2	53	12
6/25	35	1	8.3	0	0	12
6/25	36	2	10.0	0	0	12
6/25	37	1	8.5	0	0	12
6/25	38	2	8.8	0	0	12
6/26	39	1	9.0	0	0	11
6/26	40	2	7.8	0	0	11

-Continued-

## Appendix C.1. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/26	41	1	8.5	1	28	11
6/26	42	2	8.0	1	30	11
6/27	43	1	7.8	0	0	12
6/27	44	2	8.3	0	0	12
6/27	45	1	7.3	0	0	12
6/27	46	2	7.8	0	0	12
6/27	47	1	8.3	0	0	12
6/27	48	2	7.0	0	0	12
6/27	49	1	8.3	0	0	12
6/27	50	2	10.0	0	0	12
6/28	51	1	8.3	0	0	12
6/28	52	2	8.0	0	0	12
6/28	53	1	8.3	0	0	12
6/28	54	2	8.3	0	0	12
6/28	55	1	8.3	0	0	12
6/28	56	2	7.5	0	0	12
6/28	57	1	7.2	0	0	12
6/28	58	2	7.0	0	0	12
6/29	59	1	6.9	0	0	13
6/29	60	2	6.3	0	0	13
6/29	61	1	6.8	0	0	13
6/29	62	2	6.8	0	0	13
6/29	63	1	8.0	0	0	13
6/29	64	2	7.3	1	33	13
6/29	65	1	8.0	0	0	13
6/29	66	2	6.8	0	0	13
6/30	67	1	8.0	0	0	12
6/30	68	2	8.8	10	273	12
6/30	69	1	8.5	0	0	12
6/30	70	2	8.3	18	520	12
6/30	71	1	7.3	0	0	12
6/30	72	2	8.0	1	30	12
6/30	73	1	8.5	0	0	12
6/30	74	2	7.5	1	32	12
7/1	75	1	9.3	0	0	13
7/1	76	2	7.8	0	0	13
7/1	77	1	8.5	0	0	13
7/1	78	2	8.3	1	29	13
7/1	79	1	7.8	5	154	13
7/1	80	2	5.5	55	2400	13

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Appendix C.1. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/2	81	1	10.0	10	240	13
7/2	82	2	9.8	39	955	13
7/2	83	1	7.8	6	186	13
7/2	84	2	7.3	78	2564	13
7/2	85	1	7.8	2	62	13
7/2	86	2	8.5	83	2344	13
7/3	87	1	7.0	2	69	12
7/3	88	2	5.3	19	860	12
7/3	89	1	4.8	5	250	12
7/3	90	2	5.8	5	207	12
7/3	91	1	5.8	5	207	12
7/3	92	2	5.3	37	1675	12
7/3	93	1	6.8	12	424	12
7/3	94	2	5.5	34	1484	12
7/4	95	1	8.0	0	0	12
7/4	96	2	6.5	4	148	12
7/4	97	1	6.8	1	35	12
7/4	98	2	6.5	2	74	12
7/4	99	1	6.3	1	38	12
7/4	100	2	8.3	4	116	12
7/4	101	1	6.0	0	0	12
7/4	102	2	8.3	22	636	12
7/5	103	1	6.5	1	37	12
7/5	104	2	7.0	0	0	12
7/5	105	1	6.0	1	40	12
7/5	106	2	7.0	1	34	12
7/5	107	1	8.8	5	136	15
7/5	108	2	7.3	5	164	15
7/5	109	1	8.0	4	120	15
7/5	110	2	7.8	9	277	15
7/6	111	1	7.0	19	651	14
7/6	112	2	8.0	3	90	14
7/6	113	2	6.8	5	176	14
7/6	114	1	8.5	4	113	14
7/6	115	2	7.5	4	128	14
7/6	116	1	9.3	12	310	14
7/6	117	2	9.0	1	27	14
7/7	118	2	7.0	57	1954	15
7/7	119	1	8.5	23	649	15
7/7	120	2	8.5	7	198	15

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Appendix C.1. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/7	121	1	6.0	60	2400	14
7/7	122	2	4.8	48	2400	14
7/8	123	1	6.5	45	1662	14
7/8	124	2	7.3	24	789	14
7/8	125	1	9.3	26	671	14
7/8	126	2	10.5	40	914	14
7/9	127	1	9.8	85	2082	14
7/9	128	2	6.0	27	1080	14
7/10	129	1	4.8	49	2450	14
7/10	130	2	9.0	16	427	14
7/10	131	1	3.3	36	2618	14
7/10	132	2	4.8	38	1900	14
7/11	133	1	3.0	39	3120	14
7/11	134	2	7.3	32	1052	14
7/11	135	1	5.0	48	2304	14
7/11	136	2	5.0	20	960	14
7/12	137	1	7.5	61	1952	13
7/12	138	2	7.5	30	960	13
7/12	139	1	5.9	49	1945	15
7/12	140	2	9.0	60	1600	15
7/13	141	1	6.3	11	419	14
7/13	142	2	8.0	30	900	14
7/13	143	1	7.0	38	1303	14
7/13	144	2	5.8	36	1490	14
7/14	145	1	8.0	13	390	14
7/14	146	2	6.3	49	1867	14
7/14	147	1	6.0	25	1000	14
7/14	148	2	2.3	74	7722	14
7/15	149	1	9.3	11	284	14
7/15	150	2	11.0	110	2400	14
7/16	151	1	7.3	0	0	14
7/16	152	2	9.0	1	27	14
7/16	153	1	8.3	3	87	14
7/16	154	2	8.0	45	1350	14
7/17	155	1	6.8	0	0	14
7/17	156	2	8.0	2	60	14
7/17	157	1	7.0	0	0	14
7/17	158	2	11.5	54	1127	14

Appendix C.2. Sockeye salmon test-fishing data, Egegik River, 1996.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
15-Jun	1	1	6.8	1	35	12
15-Jun	2	2	5.9	7	285	12
15-Jun	3	1	10.8	1	22	12
15-Jun	4	2	8.9	1	27	12
15-Jun	5	1	6.0	24	960	12
15-Jun	6	2	6.5	14	517	12
15-Jun	7	1	11.0	7	152	12
15-Jun	8	2	11.0	28	611	12
16-Jun	9	1	7.6	2	63	11
16-Jun	10	2	7.9	22	668	11
16-Jun	11	1	7.4	3	97	11
16-Jun	12	2	7.1	14	473	11
16-Jun	13	1	6.9	9	313	11
16-Jun	14	2	7.3	22	723	11
17-Jun	15	1	5.2	0	0	12
17-Jun	16	2	5.8	26	1076	12
17-Jun	17	1	18.6	2	26	12
17-Jun	18	2	4.1	17	995	12
17-Jun	19	1	5.9	4	163	12
17-Jun	20	2	7.8	36	1108	12
17-Jun	21	1	7.3	9	296	12
17-Jun	22	2	5.0	1	48	12
18-Jun	23	1	6.4	1	38	13
18-Jun	24	2	6.9	9	313	13
18-Jun	25	1	6.8	0	0	13
18-Jun	26	2	6.9	19	661	13
18-Jun	27	2	10.9	0	0	13
18-Jun	28	1	10.0	0	0	13
18-Jun	29	2	11.0	0	0	13
19-Jun	30	1	6.9	0	0	14
19-Jun	31	2	7.1	1	34	14
19-Jun	32	1	5.8	0	0	14
19-Jun	33	2	7.8	3	92	14
20-Jun	34	1	4.5	0	0	11
20-Jun	35	2	4.8	5	250	11
20-Jun	36	1	4.8	0	0	11
20-Jun	37	2	4.5	4	213	11
20-Jun	38	1	11.5	0	0	11
20-Jun	39	2	7.9	2	61	11
20-Jun	40	1	8.5	0	0	11

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Appendix C.2. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
20-Jun	41	2	8.8	0	0	11
21-Jun	42	1	5.8	0	0	11
21-Jun	43	2	4.4	1	55	11
21-Jun	44	1	6.9	0	0	11
21-Jun	45	2	5.3	1	45	11
21-Jun	46	1	11.6	0	0	11
21-Jun	47	2	9.3	0	0	11
21-Jun	48	1	6.9	0	0	11
21-Jun	49	2	9.4	2	51	11
22-Jun	50	1	6.8	0	0	11
22-Jun	51	2	5.0	2	96	11
22-Jun	52	1	9.3	7	181	11
22-Jun	53	2	6.8	3	106	11
22-Jun	54	1	8.1	4	119	11
22-Jun	55	2	6.4	11	413	11
22-Jun	56	1	7.9	1	30	11
22-Jun	57	2	6.1	17	669	11
23-Jun	58	1	6.3	5	190	10
23-Jun	59	2	3.9	36	2215	10
23-Jun	60	1	3.5	20	1371	10
23-Jun	61	2	2.5	51	4896	10
23-Jun	62	1	4.6	3	157	10
23-Jun	63	2	4.0	49	2940	10
24-Jun	64	1	6.9	0	0	12
24-Jun	65	2	6.1	13	511	12
24-Jun	66	1	5.8	1	41	12
24-Jun	67	2	6.4	13	488	12
24-Jun	68	1	9.0	3	80	12
24-Jun	69	2	7.6	2	63	12
24-Jun	70	1	8.1	0	0	12
24-Jun	71	2	6.2	1	39	12
25-Jun	72	1	5.6	6	257	9
25-Jun	73	2	4.0	39	2340	9
25-Jun	74	1	6.1	8	314	9
25-Jun	75	2	4.4	36	1964	9
25-Jun	76	1	8.0	2	60	9
25-Jun	77	2	8.3	0	0	9
25-Jun	78	1	10.5	1	23	9
25-Jun	79	2	7.8	7	215	9
26-Jun	80	1	9.4	0	0	13

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## Appendix C.2. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
26-Jun	81	2	5.8	2	83	13
26-Jun	82	1	6.8	1	35	13
26-Jun	83	2	7.5	8	256	13
26-Jun	84	1	8.1	0	0	13
26-Jun	85	2	8.4	3	86	13
26-Jun	86	1	6.3	0	0	13
26-Jun	87	2	9.3	4	103	13
27-Jun	88	1	7.3	0	0	9
27-Jun	89	2	6.8	4	141	9
27-Jun	90	1	7.0	1	34	9
27-Jun	91	2	4.9	1	49	9
27-Jun	92	1	7.8	3	92	13
27-Jun	93	2	5.4	1	44	13
27-Jun	94	1	4.1	0	0	13
27-Jun	95	2	6.0	10	400	13
28-Jun	96	1	4.8	33	1650	15
28-Jun	97	2	5.3	44	1992	15
28-Jun	98	1	5.5	14	611	15
28-Jun	99	2	3.0	49	3920	15
28-Jun	100	1	6.3	0	0	15
28-Jun	101	2	6.0	7	280	15
28-Jun	102	1	7.4	4	130	15
28-Jun	103	2	8.1	5	148	15
29-Jun	104	1	4.1	17	995	16
29-Jun	105	2	4.5	26	1387	16
29-Jun	106	1	7.6	4	126	16
29-Jun	107	2	4.3	27	1507	16
30-Jun	108	1	9.8	3	74	16
30-Jun	109	2	6.4	13	488	16
30-Jun	110	1	5.5	0	0	16
30-Jun	111	2	4.7	1	51	16
30-Jun	112	1	5.8	4	166	16
30-Jun	113	2	4.1	22	1288	16
30-Jun	114	1	7.5	13	416	16
30-Jun	115	2	3.5	30	2057	16
1-Jul	116	1	5.5	0	0	15
1-Jul	117	2	4.3	5	279	15
1-Jul	118	1	6.1	0	0	15
1-Jul	119	2	5.0	8	384	15
1-Jul	120	1	6.8	11	388	15

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Appendix C.2. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
1-Jul	121	2	4.1	22	1288	15
1-Jul	122	1	4.0	18	1080	15
1-Jul	123	2	4.1	30	1756	15
2-Jul	124	1	6.6	3	109	15
2-Jul	125	2	4.5	18	960	15
2-Jul	126	1	6.4	5	188	15
2-Jul	127	2	5.8	13	538	15
2-Jul	128	1	9.0	9	240	15
2-Jul	129	2	3.6	42	2800	15
2-Jul	130	1	9.5	2	50	15
2-Jul	131	2	3.6	25	1667	15
3-Jul	132	1	7.5	1	32	15
3-Jul	133	2	4.5	7	373	15
3-Jul	134	1	6.8	2	71	15
3-Jul	135	2	4.6	6	313	15
3-Jul	136	1	8.0	5	150	15
3-Jul	137	2	4.8	17	850	15
3-Jul	138	1	7.9	1	30	15
3-Jul	139	2	4.1	19	1112	15
4-Jul	140	1	7.9	0	0	15
4-Jul	141	2	4.4	5	273	15
4-Jul	142	1	8.1	4	119	15
4-Jul	143	2	6.3	4	152	15
4-Jul	144	1	7.3	0	0	15
4-Jul	145	2	8.6	25	698	15
4-Jul	146	1	6.9	0	0	15
4-Jul	147	2	6.8	20	706	15
5-Jul	148	1	7.5	0	0	12
5-Jul	149	2	5.6	2	86	12
5-Jul	150	1	7.9	5	152	12
5-Jul	151	2	4.4	6	327	12
5-Jul	152	1	7.8	1	31	12
5-Jul	153	2	8.0	4	120	12
5-Jul	154	1	7.8	0	0	12
5-Jul	155	2	4.0	9	540	12
6-Jul	156	1	7.6	7	221	11
6-Jul	157	2	5.3	4	181	11
6-Jul	158	1	6.8	1	35	11
6-Jul	160	2	4.9	3	147	11
6-Jul	161	1	11.3	9	191	11

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Appendix C.2. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6-Jul	162	2	7.1	20	676	11
6-Jul	163	1	10.7	2	45	11
6-Jul	164	2	7.9	13	395	11
7-Jul	165	1	7.6	12	379	12
7-Jul	166	2	3.5	19	1303	12
7-Jul	167	1	8.0	10	300	12
7-Jul	168	2	5.5	31	1353	12
7-Jul	169	1	6.3	8	305	12
7-Jul	170	2	7.5	34	1088	12
7-Jul	171	1	6.8	4	141	12
7-Jul	172	2	5.6	22	943	12
8-Jul	173	1	5.7	11	463	13
8-Jul	174	2	4.1	34	1990	13
8-Jul	175	1	8.6	24	670	13
8-Jul	176	2	3.1	50	3871	13
8-Jul	177	1	9.0	12	320	13
8-Jul	178	2	6.6	4	145	13
8-Jul	179	1	6.9	0	0	13
8-Jul	180	2	6.5	17	628	13
9-Jul	181	1	8.6	4	112	13
9-Jul	182	2	6.4	15	563	13
9-Jul	183	1	7.0	5	171	13
9-Jul	184	2	7.5	43	1376	13
9-Jul	185	1	6.8	13	459	13
9-Jul	186	2	3.3	38	2764	13
9-Jul	187	1	6.8	3	106	13
9-Jul	188	2	5.1	27	1271	13
10-Jul	189	1	4.1	36	2107	13
10-Jul	190	2	2.6	55	5077	13
10-Jul	191	1	6.3	5	190	13
10-Jul	192	2	4.4	22	1200	13
10-Jul	193	1	5.8	6	248	13
10-Jul	194	2	3.4	38	2682	13
11-Jul	195	1	3.8	39	2463	14
11-Jul	196	2	3.6	22	1467	14
11-Jul	197	1	4.1	1	59	14
11-Jul	198	2	3.1	19	1471	14
11-Jul	199	1	9.6	2	50	14
11-Jul	200	2	4.8	3	150	14
11-Jul	201	1	7.4	0	0	14

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Appendix C.2. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
11-Jul	202	2	4.4	1	55	14
12-Jul	203	1	10.1	11	261	14
12-Jul	204	2	8.3	3	87	14
12-Jul	205	1	10.3	4	93	14
12-Jul	206	2	10.8	2	44	14

Appendix C.3. Sockeye salmon test-fishing data, Ugashik River, 1996.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/23	1	1	12.4	0	0	-
6/23	2	2	14.1	6	102	-
6/23	3	1	15.6	1	16	-
6/23	4	2	14.4	0	0	-
6/24	5	1	13.0	1	18	12
6/24	6	2	11.5	3	63	12
6/24	7	1	11.9	0	0	12
6/24	8	2	10.5	1	23	12
6/24	9	1	11.9	1	20	11
6/24	10	2	16.3	1	15	11
6/24	11	1	12.9	1	19	11
6/24	12	2	14.9	0	0	11
6/25	13	1	13.3	0	0	11
6/25	14	2	13.8	2	35	11
6/25	15	1	12.3	1	20	11
6/25	16	2	15.3	2	31	11
6/25	17	1	14.8	0	0	12
6/25	18	2	13.9	0	0	12
6/25	19	1	12.7	1	19	12
6/25	20	2	14.8	2	32	12
6/26	21	1	16.5	1	15	14
6/26	22	2	15.9	1	15	14
6/26	23	1	16.4	1	14.6	14
6/26	24	2	14.5	3	50	14
6/27	25	1	21.4	3	34	14
6/27	26	2	16.5	0	0	14
6/27	27	1	15.8	2	30	14
6/27	28	2	13.0	3	55	14
6/27	29	1	13.8	0	0	13
6/27	30	2	13.2	2	36	13
6/27	31	1	15.2	1	16	13
6/27	32	2	13.4	0	0	13
6/28	33	1	13.1	0	0	14
6/28	34	2	13.7	1	18	14
6/28	35	1	14.3	0	0	14
6/28	36	2	12.8	0	0	14
6/28	37	1	13.8	0	0	14
6/28	38	2	13.2	2	36	14
6/28	39	1	15.2	1	16	14
6/28	40	2	13.4	0	0	14

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Appendix C.3. (p 2 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/29	41	1	13.0	1	18	14
6/29	42	2	11.6	0	0	14
6/29	43	1	12.3	0	0	14
6/29	44	2	12.3	2	39	14
6/29	45	1	14.1	1	17	14
6/29	46	2	12.9	4	74	14
6/29	47	1	12.6	0	0	14
6/29	48	2	13.5	2	36	14
6/30	49	1	14.9	2	32	14
6/30	50	2	13.1	4	73	14
6/30	51	1	12.7	1	19	14
6/30	52	2	12.6	0	0	14
6/30	53	1	12.9	1	19	-
6/30	54	2	14.0	7	120	-
6/30	55	1	10.3	4	93	-
6/30	56	2	9.5	3	76	-
7/1	57	1	11.5	5	104	-
7/1	58	2	11.6	6	124	-
7/1	59	1	12.0	7	140	-
7/1	60	2	12.7	6	113	-
7/1	61	1	13.7	17	298	-
7/1	62	2	9.1	15	396	-
7/1	63	1	11.3	16	340	-
7/1	64	2	8.4	15	429	-
7/2	65	1	9.1	71	1873	-
7/2	66	2	4.7	20	1021	-
7/2	67	1	4.4	5	273	-
7/2	68	2	4.7	7	357	-
7/2	69	1	3.6	16	1067	-
7/2	70	2	2.5	23	2208	-
7/2	71	1	2.7	15	1333	-
7/2	72	2	2.8	14	1200	-
7/3	73	1	1.6	34	5100	14
7/3	74	2	2.0	23	2760	14
7/3	75	1	2.4	12	1200	14
7/3	76	2	2.4	9	900	14
7/3	77	1	2.4	19	1900	14
7/3	78	2	2.5	43	4128	14
7/3	79	1	2.7	24	2133	14
7/3	80	2	1.6	17	2550	14

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## Appendix C.3. (p 3 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/4	81	1	1.7	30	4235	14
7/4	82	2	2.0	27	3240	14
7/4	83	1	2.2	19	2072.7	14
7/4	84	2	1.7	21	2965	14
7/4	85	1	2.7	10	889	14
7/4	86	2	2.3	19	1983	14
7/4	87	1	2.3	14	1461	14
7/4	88	2	2.3	23	2400	14
7/5	89	1	2.5	23	2208	14
7/5	90	2	1.8	24	3200	14
7/5	91	1	3.2	19	1425	14
7/5	92	2	2.3	22	2296	14
7/5	93	1	3.3	7	509	13
7/5	94	2	2.4	20	2000	13
7/5	95	1	4.6	6	313	13
7/5	96	2	2.4	14	1400	13
7/6	97	1	12.6	12	229	14
7/6	98	2	5.5	16	698	14
7/6	99	1	14.6	17	279	14
7/6	100	2	8.7	16	441	14
7/6	101	1	14.5	21	348	14
7/6	102	2	10.9	8	176	14
7/6	103	1	12.5	16	307	14
7/6	104	2	9.0	23	613	14
7/7	105	1	12.3	16	312	13
7/7	106	2	11.4	13	274	13
7/7	107	1	15.5	26	403	13
7/7	108	2	7.6	15	474	13
7/7	109	1	9.8	29	710	13
7/7	110	2	8.6	32	893	13
7/7	111	1	7.1	16	541	13
7/7	112	2	4.3	16	893	13
7/8	113	1	8.3	15	434	14
7/8	114	2	6.6	8	291	14
7/8	115	1	8.7	4	110	14
7/8	116	2	5.6	24	1029	14
7/8	117	1	6.4	15	563	14
7/8	118	2	1.9	6	758	14
7/8	119	1	10.6	5	113	14
7/8	120	2	11.2	17	364	14

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## Appendix C.3. (p 4 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/9	121	1	10.0	2	48	14
7/9	122	2	10.4	13	300	14
7/9	123	1	11.4	1	21	14
7/9	124	2	8.3	9	260	14
7/9	125	1	12.7	1	19	13
7/9	126	2	12.1	11	218	13
7/9	127	1	12.1	3	60	13
7/9	128	2	12.4	4	77	13
7/10	129	1	13.3	2	36	14
7/10	130	2	11.8	11	224	14
7/10	131	1	13.5	5	89	14
7/10	132	2	14.9	15	242	14
7/10	133	1	12.0	7	140	15
7/10	134	2	11.2	10	214	15
7/10	135	1	10.0	7	168	15
7/10	136	2	11.6	10	207	15
7/11	137	1	9.9	10	242	15
7/11	138	2	5.7	9	379	15
7/11	139	1	9.1	6	158	14
7/11	140	2	13.2	21	382	14
7/12	141	1	11.8	4	81	14
7/12	142	2	9.8	13	318	14
7/12	143	1	11.8	2	41	14
7/12	144	2	13.3	10	181	14
7/12	145	1	10.4	2	46	14
7/12	146	2	6.2	15	581	14
7/12	147	1	9.0	4	107	14
7/12	148	2	11.3	7	149	14
7/13	149	1	12.2	0	0	14
7/13	150	2	10.2	4	94	14
7/13	151	1	12.9	5	93	14
7/13	152	2	11.4	4	84	14
7/13	153	1	14.1	6	102	13
7/13	154	2	16.0	9	135	13
7/13	155	1	12.7	4	76	13
7/13	156	2	7.8	9	277	13
7/14	157	1	13.6	8	141	14
7/14	158	2	13.7	8	140	14
7/14	159	1	14.1	10	170	14
7/14	160	2	14.3	6	101	14

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Appendix C.3. (p 5 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/14	161	1	14.3	3	50	14
7/14	162	2	12.9	9	167	14
7/14	163	1	8.2	8	234	14
7/14	164	2	8.8	3	82	14
7/15	165	1	8.3	17	492	13
7/15	166	2	3.1	21	1626	13
7/15	167	1	6.4	9	338	13
7/15	168	2	4.3	21	1172	13
7/15	169	1	1.9	24	3032	13
7/15	170	2	1.4	20	3429	13
7/15	171	1	2.7	15	1333	13
7/15	172	2	1.7	32	4518	13
7/16	173	1	2.9	39	3228	14
7/16	174	2	2.5	40	3840	14
7/16	177	1	1.6	23	3450	14
7/16	178	2	2.2	28	3055	14
7/17	179	1	4.7	22	1123	15
7/17	180	2	2.4	24	2400	15
7/17	181	1	3.8	23	1453	14
7/17	182	2	2.0	19	2280	14
7/18	183	1	6.0	24	960	15
7/18	184	2	4.2	23	1314	15
7/18	185	1	3.7	5	324	13
7/18	186	2	4.9	7	343	13

Appendix C.4. Sockeye salmon test-fishing data, Igushik River, 1996.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/15	1	1	15.1	0	0	14
6/15	2	2	16.5	0	0	14
6/15	3	1	15.3	0	0	14
6/15	4	2	16.6	0	0	14
6/16	5	1	15.4	0	0	13
6/16	6	2	15.0	0	0	13
6/16	7	1	15.9	0	0	13
6/16	8	2	15.6	0	0	13
6/16	9	1	15.5	1	16	14
6/16	10	2	15.4	0	0	14
6/16	11	1	15.3	7	110	14
6/16	12	2	15.4	0	0	14
6/17	13	1	16.0	0	0	11
6/17	14	2	15.3	0	0	11
6/17	15	1	15.3	0	0	11
6/17	16	2	15.3	0	0	11
6/17	17	1	15.3	10	157	13
6/17	18	2	15.1	0	0	13
6/17	19	1	16.1	0	104	13
6/17	20	2	15.4	0	0	13
6/18	21	1	15.3	0	0	12
6/18	22	2	16.0	0	0	12
6/18	23	1	19.5	0	0	12
6/18	24	2	16.6	0	0	12
6/18	25	1	16.1	1	15	12
6/18	26	2	15.4	0	0	12
6/18	27	1	15.3	0	0	12
6/18	28	2	13.9	0	0	12
6/19	29	1	15.3	0	0	12
6/19	30	2	15.3	0	0	12
6/19	31	1	15.1	0	0	12
6/19	32	2	15.5	0	0	12
6/19	33	1	15.1	1	16	12
6/19	34	2	15.5	0	0	12
6/19	35	1	15.3	3	47	12
6/19	36	2	15.5	0	0	12
6/20	37	1	16.1	0	0	12
6/20	38	2	16.0	0	0	12
6/20	39	1	15.4	0	0	12
6/20	40	2	15.5	0	0	12

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Appendix C.4. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/20	41	1	18.0	0	0	12
6/20	42	2	15.3	0	0	12
6/20	43	1	15.4	3	47	12
6/20	44	2	15.4	0	0	12
6/21	45	1	15.6	0	0	12
6/21	46	2	15.5	0	0	12
6/21	47	1	15.5	0	0	12
6/21	48	2	15.5	0	0	12
6/21	49	1	15.2	1	16	13
6/21	50	2	15.2	0	0	13
6/21	51	1	15.0	0	0	13
6/21	52	2	15.5	0	0	13
6/22	53	1	16.3	0	0	12
6/22	54	2	15.9	0	0	12
6/22	55	1	15.5	0	0	12
6/22	56	2	15.3	0	0	12
6/22	57	1	15.4	0	0	13
6/22	58	2	15.4	0	0	13
6/22	59	1	15.6	0	0	13
6/22	60	2	15.4	0	0	13
6/23	61	1	15.9	1	16	13
6/23	62	2	15.4	0	0	13
6/23	63	1	15.4	1	15	13
6/23	64	2	15.6	1	15	13
6/23	65	1	15.6	5	77	12
6/23	66	2	15.6	0	0	12
6/23	67	1	15.4	2	32	12
6/23	68	2	15.2	0	0	12
6/24	69	1	15.4	0	0	11
6/24	70	2	15.9	4	60	11
6/24	71	1	15.2	9	142	11
6/24	72	2	15.2	16	252	11
6/24	73	1	8.3	62	1804	12
6/24	74	2	14.5	2	33	12
6/24	75	1	3.0	22	1760	12
6/24	76	2	15.5	3	56	12
6/25	77	1	5.5	13	567	11
6/25	78	2	4.4	10	549	11
6/25	79	1	5.4	17	759	11
6/25	80	2	3.4	19	1351	11

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Appendix C.4. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/25	81	1	15.3	1	16	13
6/25	83	1	15.0	4	64	13
6/25	84	2	15.5	0	0	13
6/26	85	1	15.3	1	16	12
6/26	86	2	15.3	2	31	12
6/26	87	1	15.1	6	93	12
6/26	88	2	15.6	6	92	12
6/26	89	1	15.6	1	15	12
6/26	90	2	15.1	1	15	12
6/26	91	1	15.1	0	0	12
6/26	92	2	15.5	2	32	12
6/27	93	1	15.1	1	16	11
6/27	94	2	15.0	2	32	11
6/27	95	1	15.0	2	32	12
6/27	96	2	15.6	3	48	12
6/28	97	1	15.2	0	0	12
6/28	98	2	15.5	2	32	12
6/28	99	1	15.2	0	0	12
6/28	100	2	15.4	1	16	12
6/28	101	1	15.1	1	16	12
6/28	101	1	15.1	1	16	12
6/28	102	2	15.4	0	0	12
6/28	103	1	15.5	0	0	12
6/28	104	2	15.6	1	16	12
6/29	105	1	15.1	0	0	12
6/29	106	2	15.1	0	0	12
6/29	107	1	15.1	0	0	13
6/29	108	2	15.6	0	0	13
6/30	109	1	15.3	0	0	13
6/30	110	2	15.5	1	16	13
6/30	111	1	15.3	0	0	13
6/30	112	2	15.3	13	204	13
6/30	113	1	15.4	1	16	12
6/30	114	2	15.4	2	31	12
6/30	115	1	15.3	3	47	12
6/30	116	2	15.0	10	160	12
7/1	117	1	16.5	0	0	12
7/1	118	2	15.5	0	0	12
7/1	119	1	15.2	0	0	12
7/1	120	2	15.0	2	32	12

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Appendix C.4. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/1	121	1	15.4	0	0	12
7/1	122	2	15.4	9	140	12
7/1	123	1	15.4	0	0	12
7/1	124	2	12.0	25	500	12
7/2	125	1	15.0	0	0	12
7/2	126	2	15.4	0	0	12
7/2	127	1	15.6	1	15	12
7/2	128	2	15.8	3	46	12
7/2	129	1	15.3	1	16	12
7/2	130	2	15.4	2	31	12
7/2	131	1	15.5	11	170	12
7/2	132	2	15.4	14	219	12
7/3	133	1	10.3	2	47	12
7/3	134	2	15.6	15	230	12
7/3	135	1	16.3	1	15	12
7/3	136	2	10.9	14	309	12
7/3	137	1	15.6	8	123	13
7/3	138	2	15.4	4	62	13
7/3	139	1	15.4	1	16	13
7/3	140	2	15.4	11	172	13
7/4	141	1	15.4	1	16	12
7/4	142	2	15.1	0	0	12
7/4	143	1	15.3	1	16	12
7/4	144	2	5.6	30	1280	12
7/4	145	1	15.5	1	16	13
7/4	146	2	15.5	7	108	13
7/4	147	1	15.2	3	47	13
7/4	148	2	15.4	3	47	13
7/5	149	1	15.5	1	16	13
7/5	150	2	15.5	7	108	13
7/5	151	1	15.5	14	217	13
7/5	152	2	15.5	4	62	13
7/5	153	1	16.4	1	15	13
7/5	154	2	15.4	1	16	13
7/5	155	1	15.4	6	94	13
7/5	156	2	15.4	4	62	13
7/6	157	1	15.5	11	170	12
7/6	158	2	15.4	1	16	12
7/6	159	1	5.6	21	896	12
7/6	160	2	18.5	9	117	12

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## Appendix C.4. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/6	161	1	15.6	4	61	12
7/6	162	2	15.4	1	16	12
7/6	163	1	15.3	5	79	12
7/6	164	2	15.3	4	63	12
7/7	165	1	11.6	41	846	12
7/7	166	2	15	0	0	12
7/7	167	1	6.5	16	591	12
7/7	168	2	15.5	3	46	12
7/7	169	1	15.6	4	61	12
7/7	170	2	15.3	10	157	12
7/7	171	1	15.3	12	189	12
7/7	172	2	15.3	21	330	12
7/8	173	1	15.6	15	230	13
7/8	174	2	15.4	3	47	13
7/8	175	1	15.5	18	279	13
7/8	176	2	15.9	5	76	13
7/8	177	1	15.4	5	78	12
7/8	178	2	15.9	0	0	12
7/8	179	1	15.6	10	154	12
7/8	180	2	15.6	13	200	12
7/9	181	1	12.1	42	831	12
7/9	182	2	15.4	18	281	12
7/9	183	1	2.1	24	2710	12
7/9	184	2	7.6	13	403	12
7/9	185	1	14.9	47	758	12
7/9	186	2	15.8	13	198	12
7/9	187	1	6.3	52	1997	12
7/9	188	1	14	26	446	12
7/10	189	1	6.6	11	400	12
7/10	190	2	7.6	6	190	12
7/10	191	1	4.6	7	365	12
7/10	192	1	7.6	8	253	12
7/10	193	2	4.4	24	1309	12
7/10	194	1	4.1	15	878	12
7/10	195	2	2.1	11	1257	12
7/11	196	1	6.6	11	389	12
7/11	197	2	7.6	6	189	12
7/11	198	1	4.6	7	363	12
7/11	199	2	7.5	9	288	12
7/11	200	1	7.6	8	252	12

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Appendix C.4. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/11	201	2	4.4	24	1317	12
7/11	202	1	4.1	15	873	12
7/11	203	2	2.1	11	1242	12
7/12	204	1	3.5	10	686	12
7/12	205	2	3.6	16	1059	12
7/12	206	1	2.1	19	2146	12
7/12	207	2	2.1	5	565	12
7/12	208	1	5.9	4	163	13
7/12	209	2	9.3	1	26	13
7/12	210	1	11	8	175	13
7/12	211	2	15.4	0	0	13

Appendix D.1. Sockeye salmon test-fishing data, Kvichak River, 1997.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/21	1	1	11.4	0	0	15
6/21	2	1	12.0	0	0	15
6/21	3	2	12.4	0	0	15
6/21	4	2	13.1	0	0	15
6/22	5	1	11.4	0	0	14
6/22	6	1	12.0	0	0	14
6/22	7	2	12.4	0	0	14
6/22	8	2	13.1	2	37	14
6/22	9	1	12.3	0	0	13
6/22	10	1	11.8	0	0	13
6/22	11	2	12.8	1	19	13
6/22	12	2	11.1	1	22	13
6/23	13	1	12.5	0	0	13
6/23	14	1	11.5	0	0	13
6/23	15	2	11.3	0	0	13
6/23	16	2	11.8	0	0	13
6/23	17	1	9.5	0	0	15
6/23	18	1	9.0	0	0	15
6/23	19	2	11.8	4	81	15
6/23	20	2	9.0	0	0	15
6/24	21	1	10.8	0	0	13
6/24	22	1	10.5	0	0	13
6/24	23	2	10.8	0	0	13
6/24	24	2	10.5	0	0	13
6/24	25	1	10.8	0	0	14
6/24	26	1	11.3	0	0	14
6/24	27	2	10.5	3	69	14
6/24	28	2	11.5	4	83	14
6/25	29	1	11.0	2	44	13
6/25	30	1	10.0	0	0	13
6/25	31	2	10.5	0	0	13
6/25	32	2	10.5	0	0	13
6/25	33	1	11.5	1	21	13
6/25	34	1	9.8	2	49	13
6/25	35	2	12.0	6	120	13
6/25	36	2	12.8	1	19	13
6/26	37	1	8.8	0	0	14
6/26	38	1	12.0	0	0	14
6/26	39	2	11.8	3	61	14
6/26	40	2	12.3	0	0	14

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Appendix D.1. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/26	41	1	12.5	2	38	13
6/26	42	1	9.5	0	0	13
6/26	43	2	9.5	2	51	13
6/26	44	2	13.8	2	35	13
6/27	45	1	10.8	0	0	13
6/27	46	1	12.0	0	0	13
6/27	47	2	8.5	2	56	13
6/27	48	2	10.0	2	48	13
6/27	49	1	11.5	0	0	13
6/27	50	1	11.8	1	20	13
6/27	51	2	11.0	4	87	13
6/27	52	2	10.0	2	48	13
6/28	53	1	11.0	0	0	14
6/28	54	1	10.8	0	0	14
6/28	55	2	9.5	0	0	14
6/28	56	2	9.0	0	0	14
6/28	57	1	9.8	0	0	14
6/28	58	1	11.8	0	0	14
6/28	59	2	7.8	2	62	14
6/28	60	2	8.0	2	60	14
6/29	61	1	10.3	0	0	14
6/29	62	1	9.0	0	0	14
6/29	63	2	7.8	3	93	14
6/29	64	2	8.8	2	55	14
6/30	65	1	7.8	1	31	15
6/30	66	1	7.8	0	0	15
6/30	67	2	7.8	1	31	15
6/30	68	2	9.0	0	0	15
6/30	69	1	8.5	3	85	16
6/30	70	1	8.5	6	169	16
6/30	71	2	8.8	4	109	16
6/30	72	2	9.0	6	160	16
7/1	73	1	11.0	0	0	16
7/1	74	1	11.0	2	44	16
7/1	75	2	9.0	3	80	16
7/1	76	2	9.8	6	147	16
7/1	77	1	10.3	3	70	16
7/1	78	1	8.8	2	55	16
7/1	79	2	8.8	7	191	16
7/1	80	2	9.5	12	303	16

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Appendix D.1. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/2	81	1	9.0	51	1360	16
7/2	82	2	6.6	20	727	16
7/2	83	1	9.8	25	612	17
7/2	84	2	8.4	9	257	17
7/3	85	1	10.0	14	336	17
7/3	86	2	8.8	1	27	17
7/3	87	1	8.5	7	198	17
7/3	88	1	9.0	23	613	17
7/3	89	2	9.5	78	1971	17
7/3	90	2	6.0	72	2880	17
7/4	91	1	5.8	56	2317	18
7/4	92	2	7.5	5	160	18
7/4	93	2	8.4	54	1543	16
7/4	94	2	11.1	91	1963	16
7/4 <sup>1</sup>	95	1	9.5	21	530	16
7/5	96	1	8.8	124	3674	17
7/5	97	2	8.1	38	1126	17
7/5	98	1	3.4	28	1976	17
7/5	99	2	7.8	38	1169	17
7/6	100	1	7.8	113	3477	16
7/6	101	2	6.8	71	2506	16
7/6	102	1	2.9	75	6207	18
7/6	103	2	3.5	68	4663	18
7/7	104	1	9.3	165	4258	19
7/7	105	2	9.0	84	2240	19
7/7	106	1	4.0	75	4500	17
7/7	107	2	11.6	162	3352	17
7/8	108	1	6.1	73	2872	18
7/8	109	2	9.3	81	2090	18
7/8	110	1	4.1	33	1932	18
7/8	111	2	3.4	34	2400	18
7/9	112	1	9.4	99	2528	17
7/9	113	2	9.3	47	1213	17
7/9	114	1	8.5	61	1722	17
7/9	115	2	3.1	81	6271	17
7/10	116	1	7.6	53	1674	15
7/10	117	2	8.3	60	1735	15
7/10	118	1	8.8	68	1855	15
7/10	119	2	8.8	53	1455	15
7/11	120	1	8.3	43	1243	15

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Appendix D.1. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/11	121	2	8.9	15	404	15
7/11	122	1	10.4	6	138	16
7/11	123	2	8.8	67	1827	16
7/12	124	1	9.6	33	825	15
7/12	125	2	8.8	33	900	15
7/12	126	1	8.9	33	890	16
7/12	127	2	8.5	57	-1609	16
7/13	128	1	9.6	10	250	15
7/13	129	2	9.3	49	1265	15
7/13	130	1	9.6	23	575	16
7/13	131	2	8.3	48	1388	16
7/14	132	1	8.9	1	27	15
7/14	133	2	8.3	56	1619	15
7/14	134	1	8.0	1	30	15
7/14	135	2	8.3	25	723	15
7/15	136	1	9.4	19	485	15
7/15	137	2	8.6	56	1563	15
7/16	138	1	9.1	16	422	15
7/16	139	2	9.5	25	632	15
7/16	140	1	10.5	22	503	15
7/16	141	2	8.8	50	1364	15

<sup>1</sup> One afternoon drift missed.

Appendix D.2. Sockeye salmon test-fishing data, Egegik River, 1997.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
15-Jun	1	1	6.8	1	35	-
15-Jun	2	2	7.8	17	523	-
16-Jun	3	1	4.8	2	100	-
16-Jun	4	2	5.8	8	331	-
16-Jun	5	1	5.3	2	91	-
16-Jun	6	2	6.9	19	661	-
16-Jun	7	1	5.7	9	379	-
16-Jun	8	2	6.4	38	1425	-
17-Jun	9	1	13.1	5	187	11
17-Jun	10	2	11.9	47	2279	11
17-Jun	11	1	12.0	7	267	11
17-Jun	12	2	12.3	47	1771	11
17-Jun	13	1	10.8	7	309	12
17-Jun	14	2	12.7	28	1033	12
17-Jun	15	1	11.8	16	654	12
17-Jun	16	2	11.9	55	2167	12
18-Jun	17	1	7.8	1	31	18
18-Jun	18	2	4.9	39	1910	18
18-Jun	19	1	6.6	10	364	13
18-Jun	20	2	5.8	16	662	13
19-Jun	21	1	7.3	7	230	12
19-Jun	22	2	5.8	21	869	12
19-Jun	23	1	6.8	3	106	12
19-Jun	24	2	6.6	28	1018	12
19-Jun	25	1	6.8	10	353	13
19-Jun	26	2	4.6	25	1304	13
19-Jun	27	1	7.0	2	69	13
19-Jun	28	2	6.0	28	1120	13
20-Jun	29	1	5.3	3	136	12
20-Jun	30	2	3.9	2	123	12
20-Jun	31	1	6.9	4	139	12
20-Jun	32	2	5.8	10	414	12
20-Jun	33	1	8.1	10	296	13
20-Jun	34	2	5.4	20	889	13
20-Jun	35	1	7.1	5	169	13
20-Jun	36	2	6.8	18	635	13
21-Jun	37	1	6.0	2	80	11
21-Jun	38	2	5.4	12	533	11
21-Jun	39	1	6.3	0	0	11
21-Jun	40	2	7.6	40	1263	11

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Appendix D.2. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
21-Jun	41	1	4.6	17	887	12
21-Jun	42	2	6.5	21	775	12
21-Jun	43	1	5.9	32	1302	12
21-Jun	44	2	7.0	11	377	12
22-Jun	45	1	7.3	9	296	12
22-Jun	46	2	5.8	15	621	12
22-Jun	47	1	6.1	8	315	12
22-Jun	48	2	4.8	23	1150	12
22-Jun	49	1	7.8	8	246	15
22-Jun	50	2	7.0	4	137	15
22-Jun	51	1	7.3	1	33	15
22-Jun	52	2	6.8	3	106	15
23-Jun	53	1	5.4	5	222	13
23-Jun	54	2	5.1	11	518	13
23-Jun	55	1	5.8	3	124	13
23-Jun	56	2	6.3	12	457	13
23-Jun	57	1	5.4	2	88	16
23-Jun	58	2	6.6	8	291	16
23-Jun	59	1	5.6	0	0	16
23-Jun	60	2	6.9	11	383	16
24-Jun	61	1	8.6	0	0	15
24-Jun	62	2	4.6	3	157	15
24-Jun	63	1	5.4	0	0	15
24-Jun	64	2	4.9	5	245	15
24-Jun	65	1	7.3	0	0	15
24-Jun	66	2	5.8	12	497	15
24-Jun	67	1	6.6	0	0	15
24-Jun	68	2	5.1	12	565	15
25-Jun	69	1	5.9	0	0	13
25-Jun	70	2	5.6	7	300	13
25-Jun	71	1	5.4	0	0	13
25-Jun	72	2	5.4	5	222	13
25-Jun	73	1	6.0	1	40	15
25-Jun	74	2	5.6	5	214	15
25-Jun	75	1	5.6	2	86	15
25-Jun	76	2	5.2	10	462	15
26-Jun	77	1	5.8	0	0	13
26-Jun	78	2	5.4	2	89	13
26-Jun	79	1	5.5	1	44	13
26-Jun	80	2	6.1	3	118	13

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Appendix D.2. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
26-Jun	81	1	6.4	3	113	12
26-Jun	82	2	6.6	10	364	13
26-Jun	83	1	10.0	1	24	13
26-Jun	84	2	6.2	16	619	13
27-Jun	85	1	4.6	10	522	13
27-Jun	86	2	4.5	25	1333	13
27-Jun	87	2	5.2	20	923	13
27-Jun	88	1	7.1	6	203	13
27-Jun	89	1	6.4	2	75	12
27-Jun	90	2	5.1	7	329	13
27-Jun	91	1	5.6	0	0	13
27-Jun	92	2	4.1	4	234	13
28-Jun	93	1	7.1	8	270	14
28-Jun	94	2	4.9	25	1225	14
28-Jun	95	1	8.0	12	360	14
28-Jun	96	2	4.9	15	735	14
28-Jun	97	1	6.3	5	191	16
28-Jun	98	2	5.1	6	282	16
28-Jun	99	1	6.7	2	72	16
28-Jun	100	2	5.9	6	244	16
29-Jun	101	1	5.5	7	305	15
29-Jun	102	2	4.4	15	818	15
29-Jun	103	1	6.3	9	343	15
29-Jun	104	2	3.0	29	2320	15
29-Jun	105	1	7.3	3	99	15
29-Jun	106	2	4.9	16	784	15
29-Jun	107	1	6.6	8	291	15
29-Jun	108	2	7.3	7	230	15
30-Jun	109	1	7.5	8	256	16
30-Jun	110	2	4.5	21	1120	16
30-Jun	111	1	5.9	16	651	16
30-Jun	112	2	4.5	26	1387	16
30-Jun	113	1	6.7	0	0	14
30-Jun	114	2	5.8	5	207	14
30-Jun	115	1	5.6	2	86	14
30-Jun	116	2	6.5	11	406	14
1-Jul	117	1	6.7	4	143	15
1-Jul	118	2	6.3	2	76	15
1-Jul	119	1	6.3	1	38	15
1-Jul	120	2	5.8	3	124	15

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Appendix D.2. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
1-Jul	121	1	7.6	1	32	15
1-Jul	122	2	6.8	4	141	15
1-Jul	123	1	7.4	1	32	15
1-Jul	124	2	7.0	7	240	15
2-Jul	125	1	7.0	10	343	15
2-Jul	126	2	4.6	35	1826	15
2-Jul	127	1	6.8	6	212	15
2-Jul	128	2	5.0	15	720	15
3-Jul	129	1	7.1	5	169	14
3-Jul	130	2	6.8	5	176	14
3-Jul	131	1	7.5	1	32	14
3-Jul	132	2	6.8	3	106	14
3-Jul	133	1	8.9	4	108	15
3-Jul	134	2	5.0	36	1728	15
3-Jul	135	1	6.6	0	0	15
3-Jul	136	2	6.4	35	1313	15
4-Jul	137	1	6.5	1	37	16
4-Jul	138	2	5.3	1	45	16
4-Jul	139	1	6.6	1	36	16
4-Jul	140	2	7.4	1	32	16
4-Jul	141	1	8.0	3	90	19
4-Jul	142	2	6.5	39	1440	19
4-Jul	143	1	6.6	0	0	19
4-Jul	144	2	5.0	28	1344	19
5-Jul	145	1	7.1	2	67	15
5-Jul	146	2	5.6	2	86	15
5-Jul	147	1	7.0	0	0	15
5-Jul	148	2	7.3	7	230	15
5-Jul	149	1	8.1	9	267	18
5-Jul	150	2	2.9	60	4966	18
5-Jul	151	1	7.6	1	32	18
5-Jul	152	2	4.6	26	1356	18
6-Jul	153	1	5.3	1	45	17
6-Jul	154	2	4.9	9	441	17
6-Jul	155	1	5.4	2	89	17
6-Jul	156	2	4.3	7	391	17
6-Jul	157	1	3.6	13	867	19
6-Jul	158	2	4.5	41	2187	19
6-Jul	159	1	6.8	2	71	19
6-Jul	160	2	2.0	56	6720	19

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Appendix D.2. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7-Jul	161	1	6.1	17	669	18
7-Jul	162	2	3.6	61	4067	18
7-Jul	163	1	6.4	15	563	18
7-Jul	164	2	2.4	65	6500	18
7-Jul	165	1	5.3	35	1585	19
7-Jul	166	2	1.9	54	6821	19
7-Jul	167	1	4.8	31	~1550	19
7-Jul	168	2	2.7	102	9067	19
8-Jul	169	1	6.1	6	236	17
8-Jul	170	2	5.1	27	1270	17
8-Jul	171	1	5.8	6	248	17
8-Jul	172	2	6.7	29	1039	17
8-Jul	173	1	5.9	24	976	17
8-Jul	174	2	5.0	25	1200	17
8-Jul	175	1	6.5	12	433	17
8-Jul	176	2	3.5	34	2331	17
9-Jul	177	1	8.5	4	113	14
9-Jul	178	2	6.3	22	838	14
9-Jul	179	1	9.0	8	213	14
9-Jul	180	2	6.3	36	1371	14
9-Jul	181	1	6.8	57	2011	16
9-Jul	182	2	4.4	15	818	16
9-Jul	183	1	7.6	7	221	16
9-Jul	184	2	3.9	29	1785	16
10-Jul	185	1	7.1	2	68	14
10-Jul	186	2	7.6	12	379	14
10-Jul	187	1	6.6	2	73	14
10-Jul	188	2	7.0	13	446	14
10-Jul	189	1	5.4	29	1289	14
10-Jul	190	2	3.3	53	3855	14
10-Jul	191	1	5.1	26	1224	14
10-Jul	192	2	2.9	37	3062	14
11-Jul	193	1	6.3	40	1524	14
11-Jul	194	2	4.6	41	2139	14
11-Jul	195	1	6.8	39	1376	14
11-Jul	196	2	2.9	62	5131	14
11-Jul	197	1	5.9	9	366	14
11-Jul	198	2	6.6	7	255	14
11-Jul	199	1	8.6	2	56	14
11-Jul	200	2	5.3	23	1042	14

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Appendix D.2. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
12-Jul	201	1	5.8	23	952	15
12-Jul	202	2	3.5	36	2469	15
12-Jul	203	1	7.5	18	576	15
12-Jul	204	2	4.3	17	949	15
12-Jul	205	1	7.8	9	277	14
12-Jul	206	2	5.5	4	175	14
12-Jul	207	1	6.9	1	35	14
12-Jul	208	2	4.4	3	164	14

Appendix D.3. Sockeye salmon test-fishing data, Ugashik River, 1997.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/24	1	1	12.8	0	0	15
6/24	2	2	14.9	1	16	15
6/24	3	1	9.8	2	49	15
6/24	4	2	15.6	0	0	15
6/24	5	1	14.5	3	50	16
6/24	6	2	14.5	4	66	16
6/24	7	1	14.8	3	49	16
6/24	8	2	16.5	3	44	16
6/25	9	1	11.7	3	61	16
6/25	10	2	12.9	2	37	16
6/25	11	1	14.5	1	17	16
6/25	12	2	13.9	2	35	16
6/25	13	1	11.8	2	41	16
6/25	14	2	18.5	1	13	16
6/25	15	1	12.6	0	0	16
6/25	16	2	16.4	1	15	16
6/26	17	1	11.5	0	0	15
6/26	18	2	15.1	2	32	15
6/26	19	1	14.1	2	34	15
6/26	20	2	18.1	5	66	15
6/26	21	1	15.3	2	31	16
6/26	22	2	14.6	0	0	16
6/26	23	1	13.9	3	52	16
6/26	24	2	14.8	2	33	16
6/27	25	1	12.0	9	181	15
6/27	26	2	13.7	2	35	15
6/27	27	1	13.8	1	17	15
6/27	28	2	20.6	2	23	15
6/27	29	1	12.8	2	38	16
6/27	30	2	14.3	0	0	16
6/27	31	1	11.8	4	81	16
6/27	32	2	13.9	2	34	16
6/28	33	1	10.6	1	23	15
6/28	34	2	14.5	3	50	15
6/28	35	1	12.2	1	20	15
6/28	36	2	13.4	2	36	15
6/28	37	1	8.9	11	295	17
6/28	38	2	10.5	2	46	17
6/28	39	1	9.3	10	259	17
6/28	40	2	11.2	2	43	17

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Appendix D.3. (p 2 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/29	41	1	11.7	0	0	16
6/29	42	2	13.2	1	18	16
6/29	43	1	10.2	1	24	16
6/29	44	2	11.2	2	43	16
6/29	45	1	11.3	8	170	17
6/29	46	2	11.8	2	41	17
6/29	47	1	10.5	2	46	17
6/29	48	2	10.6	3	68	17
6/30	49	1	12.1	11	218	17
6/30	50	2	10.9	6	132	17
6/30	51	1	11.7	2	41	17
6/30	52	2	9.8	9	220	17
6/30	53	1	9.5	9	227	17
6/30	54	2	11.3	2	43	17
6/30	55	1	8.9	3	81	17
6/30	56	2	10.5	5	141	17
7/1	57	1	10.1	1	24	17
7/1	58	2	10.3	4	94	17
7/1	59	1	11.3	2	42	17
7/1	60	2	9.7	8	197	17
7/2	61	1	10.6	3	68	17
7/2	62	2	10.3	5	116	17
7/2	63	1	10.5	4	92	17
7/2	64	2	10.6	1	23	17
7/2	65	1	12.2	3	59	17
7/2	66	2	11.8	4	81	17
7/2	67	1	9.5	1	25	17
7/2	68	2	8.8	4	109	17
7/3	69	1	10.6	5	113	17
7/3	70	2	10.4	2	46	17
7/3	71	1	11.2	1	21	17
7/3	72	2	11.2	0	0	17
7/3	73	1	12.7	3	57	17
7/3	74	2	12.8	3	56	17
7/3	75	1	11.4	2	42	17
7/3	76	2	13.7	4	70	17
7/4	77	1	11.7	8	164	17
7/4	78	2	11.1	3	65	17
7/4	79	1	12.1	3	60	17
7/4	80	2	11.1	2	48	17

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Appendix D.3. (p 3 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/4	81	1	11.8	1	20	17
7/4	82	2	13.2	3	55	17
7/4	83	1	11.4	4	84	17
7/4	84	2	12.9	4	74	17
7/5	85	1	10.8	4	89	17
7/5	86	2	10.8	3	67	17
7/5	87	1	10.6	5	114	17
7/5	88	2	11.3	12	256	17
7/5	89	1	10.4	2	46	18
7/5	90	2	8.3	7	204	18
7/5	91	1	10.3	1	23	18
7/5	92	2	9.4	4	102	18
7/6	93	1	10.0	12	271	18
7/6	94	2	8.2	3	88	18
7/6	95	1	7.5	7	225	18
7/6	96	2	7.5	4	129	18
7/6	97	1	9.5	11	278	18
7/6	98	2	7.6	9	285	18
7/6	99	1	9.9	9	215	18
7/6	100	2	5.9	8	327	18
7/7	101	1	5.8	10	413	18
7/7	102	2	2.2	12	1099	18
7/7	103	1	3.6	6	403	18
7/7	104	2	2.5	7	681	18
7/7	105	1	5.8	10	417	19
7/7	106	2	2.3	42	4320	19
7/7	107	1	3.3	12	868	19
7/7	108	2	2.2	22	2382	19
7/8	109	1	3.5	11	747	18
7/8	110	2	1.1	11	2382	18
7/8	111	1	2.1	9	1013	18
7/8	112	2	1.3	13	2370	18
7/8	113	1	3.5	13	891	18
7/8	114	2	2.3	32	3376	18
7/8	115	1	3.1	19	1459	18
7/8	116	2	3.8	19	1190	18
7/9	117	1	2.4	39	3983	17
7/9	118	2	2.5	15	1469	17
7/9	119	1	3.4	20	1426	17
7/9	120	2	2.1	13	1607	17

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Appendix D.3. (p 4 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/9	121	1	3.1	23	1771	18
7/9	122	2	2.6	22	2064	18
7/9	123	1	2.2	9	967	18
7/9	124	2	2.9	16	1313	18
7/10	125	1	3.4	26	1840	18
7/10	126	2	2.3	20	2057	18
7/10	127	1	2.5	17	1660	18
7/10	128	2	2.0	16	1961	18
7/10	129	1	2.1	10	1125	18
7/10	130	2	2.0	8	944	18
7/10	131	1	4.2	16	925	18
7/10	132	2	3.2	18	1354	18
7/11	133	1	3.1	32	2504	18
7/11	134	2	3.2	39	2917	18
7/11	135	1	3.2	16	1197	18
7/11	136	2	3.2	32	2432	18
7/11	137	1	2.9	43	3600	18
7/11	138	2	1.9	27	3352	18
7/11	139	1	1.5	27	4296	18
7/11	140	2	1.7	27	2888	18
7/12	141	1	2.4	21	2103	17
7/12	142	2	2.6	22	2057	17
7/12	143	1	3.1	13	1001	17
7/12	144	2	1.7	23	3312	17
7/12	145	1	3.0	12	960	17
7/12	146	2	2.1	15	1742	17
7/12	147	1	2.4	11	1100	17
7/12	148	2	2.4	8	786	17
7/13	149	1	2.8	29	2508	17
7/13	150	2	2.0	27	3295	17
7/13	151	1	2.6	9	823	17
7/13	152	2	2.3	24	2532	17
7/13	153	1	1.8	25	3303	17
7/13	154	2	1.9	14	1753	17
7/13	155	1	2.5	23	2223	17
7/13	156	2	2.9	13	1061	17
7/14	157	1	3.4	35	2489	17
7/14	158	2	2.4	16	1594	17
7/14	159	1	2.6	30	2824	17
7/14	160	2	3.0	19	1512	17

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Appendix D.3. (p 5 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/14	161	1	1.5	26	4114	17
7/14	162	2	1.8	26	3549	17
7/14	163	1	1.9	24	3072	17
7/14	164	2	2.0	19	2280	17
7/15	165	1	2.5	11	1042	17
7/15	166	2	2.3	7	723	17
7/15	167	1	3.6	8	540	17
7/15	168	2	2.4	10	990	17
7/15	169	1	2.6	35	3190	17
7/15	170	2	2.5	32	2135	17
7/15	171	1	1.9	32	4096	17
7/15	172	2	1.4	18	3032	17
7/16	173	1	7.7	3	94	17
7/16	174	2	4.7	26	1325	17
7/16	175	1	3.5	1	69	16
7/16	176	2	4.3	19	1050	16
7/17	177	1	7.3	13	428	16
7/17	178	2	3.5	12	827	16
7/17	179	1	5.7	11	462	16
7/17	180	2	5.2	11	513	16
7/17	181	1	3.7	25	1644	16
7/17	182	2	4.5	10	533	16
7/17	183	1	3.6	17	1144	16
7/17	184	2	3.6	13	869	16
7/18	185	1	2.5	29	3775	16
7/18	186	2	2.5	21	2043	16
7/18	187	1	4.7	12	608	16
7/18	188	2	3.2	13	967	16

Appendix D.4. Sockeye salmon test-fishing data, Igushik River, 1997.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/17	1	1	16.0	0	0	17
6/17	2	2	16.0	1	15	17
6/17	3	1	14.5	3	50	17
6/17	4	2	14.5	5	83	17
6/18	5	1	14.3	0	0	17
6/18	6	2	15.0	0	0	17
6/18	7	1	16.0	1	15	17
6/18	8	2	15.8	2	30	17
6/18	9	1	15.5	0	0	18
6/18	10	2	12.8	1	19	18
6/18	11	1	15.3	0	0	18
6/18	12	2	16.3	6	89	18
6/19	13	1	45.3	0	0	17
6/19	14	2	47.5	2	29	17
6/19	15	1	46.5	5	80	17
6/19	16	2	45.8	10	160	17
6/19	17	1	27.8	0	0	18
6/19	18	2	26.3	9	160	18
6/19	19	1	30.6	1	16	18
6/19	20	2	32.6	17	252	18
6/20	21	1	14.8	2	33	17
6/20	22	2	12.8	1	19	17
6/20	23	1	14.5	1	17	17
6/20	24	2	16.8	9	128	17
6/20	25	1	13.8	0	0	18
6/20	26	2	13.8	5	87	18
6/20	27	1	14.5	1	17	18
6/20	28	2	15.3	9	142	18
6/21	29	1	14.8	2	33	17
6/21	30	2	13.5	0	0	17
6/21	31	1	14.5	1	17	17
6/21	32	2	15.8	16	244	17
6/21	33	1	15.5	7	109	18
6/21	34	2	15.3	11	173	18
6/21	35	1	16.5	20	291	18
6/21	36	2	15.8	22	333	18
6/22	37	1	15.3	1	16	18
6/22	38	2	15.8	5	77	18
6/22	39	1	15.3	2	31	18
6/22	40	2	16.8	9	129	18

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Appendix D.4. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/22	41	1	17.0	8	112	18
6/22	42	2	14.8	0	0	18
6/22	43	1	17.5	17	232	18
6/22	44	2	17.0	21	295	18
6/23	45	1	14.5	1	17	18
6/23	46	2	15.5	3	47	18
6/23	47	1	15.3	2	31	18
6/23	48	2	19.5	27	332	18
6/23	49	1	14.0	5	85	19
6/23	50	2	13.5	0	0	19
6/23	51	1	13.0	11	202	19
6/23	52	2	14.5	9	149	19
6/24	53	1	14.5	1	17	18
6/24	54	2	14.8	6	98	18
6/24	55	1	14.5	3	49	18
6/24	56	2	15.5	13	200	18
6/24	57	1	13.8	0	0	19
6/24	58	2	11.8	11	225	19
6/24	59	1	14.3	1	17	19
6/24	60	2	14.5	14	232	19
6/25	63	1	14.3	4	67	18
6/25	64	2	15.3	12	190	18
6/25	65	1	14.8	1	16	18
6/25	66	2	13.8	12	209	18
6/25	67	1	12.5	2	38	19
6/25	68	2	14.0	36	614	19
6/26	69	1	14.8	1	16	18
6/26	70	2	14.8	4	65	18
6/26	71	1	14.3	0	0	18
6/26	72	2	15.0	9	145	18
6/26	73	1	13.5	1	18	20
6/26	74	2	15.8	22	334	20
6/26	75	1	11.5	2	42	20
6/26	76	2	13.0	12	222	20
6/27	77	1	13.0	1	18	19
6/27	78	2	13.3	0	0	19
6/27	79	1	13.8	4	70	19
6/27	80	2	13.8	9	158	19
6/27	81	1	14.0	2	34	20
6/27	82	2	14.5	11	183	20

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## Appendix D.4. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/27	83	1	14.5	0	0	20
6/27	84	2	16.3	20	297	20
6/28	85	1	15.0	1	16	19
6/28	86	2	13.5	10	178	19
6/28	87	1	13.0	1	18	19
6/28	88	2	13.5	16	284	19
6/28	89	1	14.3	0	0	20
6/28	90	2	8.3	1	29	20
6/28	91	1	14.5	1	16	20
6/28	92	2	13.8	2	35	20
6/29	93	1	14.3	0	0	19
6/29	94	2	11.8	7	142	19
6/29	95	1	14.5	11	181	19
6/29	96	2	15.5	27	418	19
6/29	97	1	14.3	2	34	19
6/29	98	2	14.0	8	137	19
6/29	99	1	12.8	5	94	19
6/29	100	2	14.3	14	236	19
6/30	101	1	14.3	4	67	18
6/30	102	2	14.5	44	724	18
6/30	103	1	14.5	9	150	19
6/30	104	2	17.0	40	565	19
7/1	105	1	13.8	2	35	18
7/1	106	2	14.5	5	83	18
7/1	107	1	14.8	1	16	18
7/1	108	2	15.0	11	177	18
7/1	109	1	15.5	16	246	20
7/1	110	2	14.0	20	345	20
7/1	111	1	14.5	20	329	20
7/1	112	2	13.5	30	537	20
7/2	113	1	9.5	4	100	18
7/2	114	2	11.8	21	429	18
7/2	115	1	12.3	8	157	18
7/2	116	2	7.0	12	411	18
7/2	117	1	15.0	8	128	19
7/2	118	2	13.0	34	632	19
7/2	119	1	14.5	17	280	19
7/2	120	2	15.5	42	647	19
7/3	121	1	13.8	8	140	18
7/3	122	2	14.5	14	232	18

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Appendix D.4. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/3	123	1	14.5	7	117	18
7/3	124	2	15.0	22	354	18
7/3	125	1	13.0	4	74	20
7/3	126	2	14.0	44	750	20
7/3	127	1	12.0	15	302	20
7/3	128	2	15.5	58	893	20
7/4	129	1	14.0	5	85	19
7/4	130	2	14.5	24	397	19
7/4	131	1	14.3	11	186	19
7/4	132	2	15.8	41	628	19
7/4	133	1	13.8	8	140	20
7/4	134	2	10.3	41	953	20
7/4	135	1	13.0	18	330	20
7/4	136	2	12.0	50	993	20
7/5	137	1	13.8	6	105	19
7/5	138	2	14.8	15	245	19
7/5	139	1	13.8	4	70	19
7/5	140	2	14.3	36	603	19
7/5	141	1	14.5	5	83	19
7/5	142	2	14.3	18	301	19
7/5	143	1	14.0	13	223	19
7/5	144	2	13.8	32	562	19
7/6	145	1	14.3	4	68	19
7/6	146	2	14.0	17	290	19
7/6	147	1	14.8	9	146	19
7/6	148	2	13.3	33	594	19
7/6	149	1	13.5	26	462	20
7/6	150	2	9.8	27	670	20
7/6	151	1	12.0	16	320	20
7/6	152	2	11.0	45	989	20
7/7	153	1	13.5	16	284	18
7/7	154	2	12.3	25	493	18
7/7	155	1	10.8	21	472	20
7/7	156	2	10.3	40	937	20
7/8	157	1	9.5	9	225	18
7/8	158	2	6.3	35	1327	18
7/8	159	1	8.5	13	364	18
7/8	160	2	6.5	48	1772	18
7/8	161	1	5.8	13	535	20
7/8	162	2	6.0	15	608	20

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## Appendix D.4. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/8	163	1	4.8	8	411	20
7/8	164	2	4.3	15	864	20
7/9	165	1	7.3	8	268	18
7/9	166	2	7.0	27	926	18
7/9	167	1	7.0	6	206	18
7/9	168	2	6.3	31	1175	18
7/9	169	1	7.0	13	446	19
7/9	170	2	6.5	22	812	19
7/9	171	1	10.8	1	22	19
7/9	172	2	6.3	41	1596	19
7/10	173	1	9.5	10	255	18
7/10	174	2	5.5	28	1222	18
7/10	175	1	10.0	9	216	18
7/10	176	2	5.8	33	1397	18
7/10	177	1	5.8	16	668	19
7/10	178	2	5.5	41	1762	19
7/10	179	1	6.0	26	1055	19
7/10	180	2	4.0	31	1860	19
7/11	181	1	5.8	42	1729	18
7/11	182	2	3.8	16	1024	18
7/11	183	1	6.8	59	2123	18
7/11	184	2	4.5	26	1387	18
7/11	185	1	5.3	12	549	19
7/11	186	2	5.0	25	1180	19
7/11	187	1	4.0	21	1260	19
7/11	188	2	6.8	48	1727	19
7/12	189	1	4.0	19	1164	18
7/12	190	2	5.0	23	1086	18
7/12	191	1	3.3	22	1667	18
7/12	192	2	5.8	28	1185	18
7/12	193	1	10.5	9	206	18
7/12	194	2	6.0	44	1785	18
7/12	195	1	7.8	4	124	18
7/12	196	2	4.8	36	1789	18
7/13	197	1	6.8	6	213	18
7/13	198	2	5.8	28	1153	18
7/13	199	1	6.3	9	341	18
7/13	200	2	4.8	24	1233	18
7/13	201	1	7.8	8	250	18
7/13	202	2	7.0	28	1006	18

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Appendix D.4. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/13	203	1	6.0	18	720	18
7/13	204	2	6.8	24	864	18
7/14	205	1	11.8	8	165	18
7/14	206	2	4.5	19	995	18
7/14	207	1	11.0	18	390	18
7/14	208	2	6.5	24	886	18

Appendix E.1. Sockeye salmon test-fishing data, Kvichak River, 1998.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/20	1	1	7.5	0	0	9
6/20	2	2	6.7	0	0	9
6/21	3	1	8.7	0	0	9
6/21	4	1	7.5	0	0	9
6/21	5	2	8.2	1	29	9
6/21	6	2	10.0	0	0	9
6/21	7	1	10.0	0	0	9
6/21	8	1	10.0	0	0	9
6/21	9	2	10.8	0	0	9
6/21	10	2	10.3	0	0	9
6/22	11	1	11.0	0	0	9
6/22	12	1	10.5	0	0	9
6/22	13	1	9.8	0	0	9
6/22	14	2	10.3	0	0	9
6/22	15	2	9.5	0	0	9
6/23	16	1	10.8	0	0	10
6/23	17	1	10.3	0	0	10
6/23	18	2	10.5	0	0	10
6/23	19	2	11.8	0	0	10
6/23	20	1	10.8	0	0	10
6/23	21	1	10.5	0	0	10
6/23	22	2	10.5	0	0	10
6/23	23	2	10.3	0	0	10
6/24	24	1	10.3	0	0	11
6/24	25	1	10.5	0	0	11
6/24	26	2	10.3	0	0	11
6/24	27	2	11.0	0	0	11
6/24	28	1	10.3	0	0	12
6/24	29	1	10.0	0	0	12
6/24	30	2	10.8	2	44	12
6/24	31	2	10.0	0	0	12
6/25	32	1	10.0	0	0	12
6/25	33	1	9.5	3	76	12
6/25	34	2	9.8	0	0	12
6/25	35	2	9.5	1	25	12
6/25	36	1	10.5	0	0	12
6/25	37	1	10.3	0	0	12
6/25	38	2	10.8	11	244	12
6/25	39	2	9.5	5	126	12
6/26	40	1	8.8	0	0	13

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Appendix E.1. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/26	41	1	8.8	1	27	13
6/26	42	2	9.8	15	367	13
6/26	43	2	10.0	9	216	13
6/26	44	1	9.0	1	27	13
6/26	45	1	9.5	1	25	13
6/26	46	2	10.8	14	311	13
6/26	47	2	10.3	7	163	13
6/27	48	1	9.3	0	0	12
6/27	49	1	9.5	0	0	12
6/27	50	2	9.5	0	0	12
6/27	51	2	10.5	0	0	12
6/27	52	1	10.3	0	0	13
6/27	53	1	9.5	0	0	13
6/27	54	2	10.3	2	47	13
6/27	55	2	10.8	3	67	13
6/28	56	1	9.0	0	0	12
6/28	57	1	9.0	0	0	12
6/28	58	2	9.0	0	0	12
6/28	59	2	9.0	0	0	12
6/28	60	1	9.8	0	0	13
6/28	61	1	10.3	0	0	13
6/28	62	2	9.0	1	27	13
6/28	63	2	9.5	3	76	13
6/29	64	1	9.3	0	0	14
6/29	65	1	9.5	0	0	14
6/29	66	2	9.8	0	0	14
6/29	67	2	9.8	1	24	14
6/29	68	1	10.0	1	24	15
6/29	69	1	9.5	0	0	15
6/29	70	2	10.8	4	89	15
6/29	71	2	10.8	13	289	15
6/30	72	1	9.0	1	27	14
6/30	73	1	10.3	0	0	14
6/30	74	2	10.0	5	120	14
6/30	75	2	9.5	5	126	14
6/30	76	1	10.3	0	0	15
6/30	77	1	9.8	0	0	15
6/30	78	2	10.5	2	46	15
6/30	79	2	10.0	3	72	15
7/1	80	1	10.3	0	0	15

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Appendix E.1. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/1	81	1	9.0	0	0	15
7/1	82	2	9.8	10	245	15
7/1	83	2	11.0	20	436	15
7/1	84	1	10.5	1	23	14
7/1	85	1	10.8	1	22	14
7/1	86	2	9.8	101	2473	14
7/1	87	2	8.3	131	3788	14
7/2	88	1	10.3	67	1561	14
7/2	89	2	9.3	96	2477	14
7/3	90	1	11.3	50	1062	13
7/3	91	2	9.5	112	2829	13
7/3	92	1	10.5	34	777	12
7/3	93	2	10.5	97	2217	12
7/4	94	1	10.5	54	1234	14
7/4	95	2	10.3	108	2517	14
7/4	96	1	10.3	69	1608	13
7/4	97	2	10.0	201	4824	13
7/5	98	1	10.0	26	624	13
7/5	99	2	9.8	56	1371	13
7/5	100	1	8.8	31	845	13
7/5	101	2	9.5	159	4017	13
7/6	102	1	9.3	12	310	13
7/6	103	2	9.3	46	1187	13
7/6	104	1	10.0	13	312	13
7/6	105	2	10.0	104	2496	13
7/7	106	1	11.3	17	361	13
7/7	107	2	11.0	33	720	13
7/7	108	1	9.8	20	490	13
7/7	109	2	10.3	79	1841	13
7/8	110	1	10.3	8	186	13
7/8	111	2	10.8	26	578	13
7/8	112	1	10.3	121	2819	13
7/8	113	2	10.8	112	2489	13
7/9	114	1	4.5	140	7467	13
7/9	115	2	5.8	111	4593	13
7/9	116	1	8.5	115	3247	13
7/9	117	2	7.8	110	3385	13
7/10	118	1	9.0	56	1493	13
7/10	119	2	9.3	111	2865	13
7/10	120	1	9.0	67	1729	13

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Appendix E.1. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/10	121	2	10.3	150	3495	13
7/11	122	1	8.5	21	593	13
7/11	123	2	8.0	88	2640	13
7/11	124	1	9.0	16	427	13
7/11	125	2	7.5	83	2656	13
7/12	126	1	7.8	33	1015	14
7/12	127	2	8.0	77	2310	14
7/12	128	2	6.5	129	4763	14
7/12	129	1	7.0	10	343	14
7/13	130	2	8.3	33	954	13
7/13	131	1	8.3	22	636	13
7/13	132	1	8.8	13	355	13
7/13	133	2	10.5	109	2491	13
7/14	134	2	7.8	2	62	13
7/14	135	1	8.0	0	0	13
7/14	136	1	9.5	1	25	13
7/14	137	2	10.3	20	466	13
7/15	138	1	8.3	2	58	14
7/15	139	2	8.3	13	375	14
7/15	140	1	9.3	0	0	14
7/15	141	2	9.5	7	177	14
7/16	142	1	9.5	5	126	14
7/16	143	2	10.3	35	884	14

<sup>1</sup> Two morning drifts missed. Crew was assisting Fish and Wildlife Protection.

Appendix E.2. Sockeye salmon test-fishing data, Egegik River, 1998.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
14-Jun	1	1	8.3	10	289	14
14-Jun	2	2	8.8	5	136	14
14-Jun	3	1	5.9	0	0	14
14-Jun	4	2	5.9	2	81	14
15-Jun	5	1	8.3	1	29	10
15-Jun	6	2	6.3	9	343	10
15-Jun	7	1	7.3	1	33	10
15-Jun	8	2	6.4	10	375	10
15-Jun	9	1	5.6	4	171	11
15-Jun	10	2	6.0	19	760	11
15-Jun	11	1	5.6	4	171	11
15-Jun	12	2	5.9	18	732	11
16-Jun	13	1	6.5	1	37	10
16-Jun	14	2	5.5	5	218	10
16-Jun	15	1	6.3	2	76	10
16-Jun	16	2	5.5	2	87	10
16-Jun	17	1	10.6	3	68	11
16-Jun	18	2	5.4	12	533	11
16-Jun	19	1	10.3	1	23	11
16-Jun	20	2	5.9	19	773	11
17-Jun	21	1	8.5	1	28	10
17-Jun	22	2	6.5	2	74	10
17-Jun	23	1	6.5	2	74	10
17-Jun	24	2	5.5	6	262	10
17-Jun	25	1	6.9	1	35	12
17-Jun	26	2	8.0	6	180	12
17-Jun	27	1	7.9	0	0	12
17-Jun	28	2	6.9	0	0	12
18-Jun	29	1	5.8	1	41	11
18-Jun	30	2	7.4	1	32	11
18-Jun	31	1	8.1	1	30	11
18-Jun	32	2	6.6	1	36	11
18-Jun	33	1	6.4	0	0	9
18-Jun	34	2	7.0	7	240	9
18-Jun	35	1	6.8	4	141	9
18-Jun	36	2	6.4	5	188	9
19-Jun	37	1	7.1	1	34	10
19-Jun	38	2	7.4	3	97	10
19-Jun	39	1	9.5	3	76	10
19-Jun	40	2	7.1	4	135	10

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Appendix E.2. (p 2 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
19-Jun	41	1	5.9	1	41	10
19-Jun	42	2	7.2	5	167	10
19-Jun	43	1	7.0	0	0	10
19-Jun	44	2	8.3	7	202	10
20-Jun	45	1	6.9	0	0	10
20-Jun	46	2	7.9	3	91	10
20-Jun	47	1	9.4	3	77	10
20-Jun	48	2	7.0	1	34	10
20-Jun	49	1	6.5	3	111	8
20-Jun	50	2	7.8	10	308	8
20-Jun	51	1	6.9	1	35	8
20-Jun	52	2	6.9	6	209	8
21-Jun	53	1	7.4	1	32	11
21-Jun	54	2	8.4	7	200	11
21-Jun	55	1	7.9	0	0	11
21-Jun	56	2	8.3	10	289	11
22-Jun	57	1	6.9	8	278	9
22-Jun	58	2	8.3	13	376	9
22-Jun	59	1	6.3	12	457	9
22-Jun	60	2	6.3	13	495	9
22-Jun	61	1	7.3	14	460	8
22-Jun	62	2	4.0	21	1260	8
22-Jun	63	1	7.3	33	1085	8
22-Jun	64	2	7.0	40	1371	8
23-Jun	65	1	7.6	4	126	8
23-Jun	66	2	8.1	10	296	8
23-Jun	67	1	7.8	3	92	8
23-Jun	68	2	10.0	20	480	8
23-Jun	69	1	8.3	23	665	9
23-Jun	70	2	8.1	9	267	9
23-Jun	71	1	8.0	5	150	9
23-Jun	72	2	9.0	9	240	9
24-Jun	73	1	6.1	2	79	8
24-Jun	74	2	7.6	3	95	8
24-Jun	75	1	7.8	4	123	8
24-Jun	76	2	9.0	15	400	8
24-Jun	77	1	4.5	38	2027	10
24-Jun	78	2	5.4	18	800	10
24-Jun	79	1	9.4	20	511	10
24-Jun	80	2	5.8	52	2152	10

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Appendix E.2. (p 3 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
25-Jun	81	1	7.1	7	237	10
25-Jun	82	2	7.3	22	723	10
25-Jun	83	1	8.4	9	257	10
25-Jun	84	2	8.0	42	1260	10
25-Jun	85	1	10.0	55	1320	10
25-Jun	86	2	7.6	72	2274	10
25-Jun	87	1	10.6	11	249	10
25-Jun	88	2	14.6	39	641	10
26-Jun	89	1	6.0	1	40	9
26-Jun	90	2	6.6	2	73	9
26-Jun	91	1	7.8	0	0	9
26-Jun	92	2	6.8	3	106	9
26-Jun	93	1	6.8	22	776	12
26-Jun	94	2	5.6	20	857	12
26-Jun	95	1	5.4	12	533	12
26-Jun	96	2	7.0	22	754	12
27-Jun	97	1	10.5	3	69	11
27-Jun	98	2	6.4	2	75	11
27-Jun	99	1	7.1	6	203	11
27-Jun	100	2	6.3	18	686	11
27-Jun	101	1	4.3	50	2791	11
27-Jun	102	2	4.9	42	2057	11
27-Jun	103	1	7.4	10	324	11
27-Jun	104	2	11.6	23	476	11
28-Jun	105	1	7.3	2	66	11
28-Jun	106	2	5.6	1	43	11
28-Jun	107	1	7.1	0	0	11
28-Jun	108	2	7.5	2	64	11
28-Jun	109	1	8.5	2	56	12
28-Jun	110	2	7.4	13	422	12
28-Jun	111	1	6.5	3	111	12
28-Jun	112	2	7.5	23	736	12
29-Jun	113	1	9.4	6	153	12
29-Jun	114	2	6.1	22	866	12
29-Jun	115	1	8.5	2	56	12
29-Jun	116	2	8.1	36	1067	12
29-Jun	117	1	4.6	6	313	13
29-Jun	118	2	3.5	56	3840	13
29-Jun	119	1	5.8	15	621	13
29-Jun	120	2	4.6	49	2557	13

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## Appendix E.2. (p 4 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
30-Jun	121	1	5.9	12	488	12
30-Jun	122	2	6.3	28	1067	12
30-Jun	123	1	5.4	26	1156	12
30-Jun	124	2	3.5	82	5623	12
30-Jun	125	1	4.8	48	2400	13
30-Jun	126	2	3.9	44	2708	13
30-Jun	127	1	5.3	20	906	13
30-Jun	128	2	3.0	38	3040	13
1-Jul	129	1	7.9	2	61	12
1-Jul	130	2	7.5	2	64	12
1-Jul	131	1	8.1	1	30	12
1-Jul	132	2	9.3	9	232	12
1-Jul	133	1	8.5	3	85	14
1-Jul	134	2	7.3	34	1118	14
1-Jul	135	1	7.6	6	190	14
1-Jul	136	2	9.5	5	126	14
2-Jul	137	1	6.8	0	0	13
2-Jul	138	2	6.8	7	247	13
2-Jul	139	1	11.4	1	21	13
2-Jul	140	2	9.5	15	379	13
2-Jul	141	1	8.0	7	210	14
2-Jul	142	2	6.5	0	0	14
2-Jul	143	1	7.6	1	32	14
2-Jul	144	2	7.9	3	91	14
3-Jul	145	1	7.3	0	0	11
3-Jul	146	2	6.5	30	1108	11
3-Jul	147	1	7.1	1	34	11
3-Jul	148	2	6.9	9	313	11
3-Jul	149	1	6.1	9	354	11
3-Jul	150	2	6.5	8	295	11
3-Jul	151	1	7.8	2	62	11
3-Jul	152	2	3.4	51	3600	11
4-Jul	153	1	6.9	1	35	12
4-Jul	154	2	8.1	52	1541	12
4-Jul	155	1	13.8	0	0	12
4-Jul	156	2	5.4	17	756	12
4-Jul	157	1	7.6	3	95	11
4-Jul	158	2	6.9	8	278	11
4-Jul	159	1	7.5	2	64	11
4-Jul	160	2	7.1	11	372	11

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Appendix E.2. (p 5 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
5-Jul	161	1	7.1	2	68	12
5-Jul	162	2	4.3	19	1060	12
5-Jul	163	1	6.3	16	610	12
5-Jul	164	2	5.0	37	1776	12
6-Jul	165	1	6.3	31	1181	12
6-Jul	166	2	3.6	53	3533	12
6-Jul	167	1	7.1	34	1149	12
6-Jul	168	2	7.3	39	1282	12
6-Jul	169	1	8.1	3	89	11
6-Jul	170	2	2.3	53	5530	11
6-Jul	171	1	9.8	12	294	11
6-Jul	172	2	6.1	39	1534	11
7-Jul	173	1	6.5	2	74	12
7-Jul	174	2	7.1	21	710	12
7-Jul	175	1	6.8	4	141	12
7-Jul	176	2	8.6	9	251	12
7-Jul	177	1	7.1	4	135	13
7-Jul	178	2	6.5	36	1329	13
7-Jul	179	1	6.8	1	35	13
7-Jul	180	2	7.3	3	99	13
8-Jul	181	1	7.0	8	274	10
8-Jul	182	2	7.1	7	237	10
8-Jul	183	1	7.4	13	422	10
8-Jul	184	2	7.3	12	395	10
8-Jul	185	1	6.5	6	222	13
8-Jul	186	2	6.6	2	73	13
8-Jul	187	1	6.6	0	0	13
8-Jul	188	2	7.5	0	0	13
9-Jul	189	1	6.5	1	37	11
9-Jul	190	2	6.5	1	37	11
9-Jul	191	1	7.5	1	32	11
9-Jul	192	2	8.4	7	200	11
9-Jul	193	1	7.4	16	519	11
9-Jul	194	2	8.6	3	84	11
9-Jul	195	1	8.8	0	0	11
9-Jul	196	2	8.9	2	54	11
10-Jul	197	1	7.3	7	230	12
10-Jul	198	2	6.5	9	332	12
10-Jul	199	1	6.5	6	222	12
10-Jul	200	2	7.4	28	908	12

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Appendix E.2. (p 6 of 6)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
10-Jul	201	1	7.1	14	473	11
10-Jul	202	2	10.3	10	233	11
10-Jul	203	1	8.3	4	116	11
10-Jul	204	2	9.0	1	27	11
11-Jul	205	1	8.1	10	296	11
11-Jul	206	2	4.9	36	1763	11
11-Jul	207	1	5.8	14	579	11
11-Jul	208	2	7.0	39	1337	11
11-Jul	209	1	8.8	36	982	12
11-Jul	210	2	8.8	2	55	12
11-Jul	211	1	7.6	12	379	12
11-Jul	212	2	7.9	2	61	12
12-Jul	213	1	8.6	2	56	12
12-Jul	214	2	7.6	3	95	12
12-Jul	215	1	7.8	1	31	12
12-Jul	216	2	7.9	5	152	12
12-Jul	217	1	8.1	8	237	12
12-Jul	218	2	7.9	1	30	12
12-Jul	219	1	17.5	5	69	12
12-Jul	220	2	7.8	4	123	12
13-Jul	221	1	5.9	13	529	12
13-Jul	222	2	7.1	38	1285	12
13-Jul	223	1	5.8	24	993	12
13-Jul	224	2	5.6	91	3900	12
13-Jul	225	1	8.6	0	0	12
13-Jul	226	2	9.4	21	536	12
13-Jul	227	1	8.5	2	56	12
13-Jul	228	2	9.5	19	480	12

Appendix E.3. Sockeye salmon test-fishing data, Ugashik River, 1998.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/26	1	1	15.8	1	15	14
6/26	2	2	16.9	7	99	14
6/26	3	1	15.2	3	47	14
6/26	4	2	15.0	1	16	14
6/26	5	2	11.5	3	62	14
6/26	6	1	12.5	3	58	14
6/26	7	2	13.5	1	18	14
6/26	8	1	11.2	5	107	14
6/27	9	2	12.5	1	19	11
6/27	10	1	15.6	3	46	11
6/27	11	2	13.5	1	18	11
6/27	12	1	15.6	0	0	11
6/27	13	2	15.1	1	16	12
6/27	14	1	14.5	4	66	12
6/27	15	2	14.6	2	33	12
6/27	16	1	15.0	2	32	12
6/28	17	2	14.5	0	0	12
6/28	18	1	15.5	0	0	12
6/28	19	2	14.6	0	0	12
6/28	20	1	15.6	3	46	12
6/28	21	2	15.2	6	95	13
6/28	22	1	15.6	2	31	13
6/28	23	2	14.5	6	99	13
6/28	24	1	14.6	0	0	13
6/29	25	2	15.7	3	46	13
6/29	26	1	15.2	1	16	13
6/29	27	2	15.1	1	16	13
6/29	28	1	15.7	2	31	13
6/29	29	2	15.7	3	46	15
6/29	30	1	15.0	1	16	15
6/29	31	2	14.0	1	17	15
6/29	32	1	14.7	1	16	15
6/30	33	2	14.7	2	33	14
6/30	34	1	15.0	2	32	14
6/30	35	2	15.1	1	16	14
6/30	36	1	14.6	0	0	14
6/30	37	2	15.2	1	16	14
6/30	38	1	15.1	1	16	14
6/30	39	2	14.7	0	0	14
6/30	40	1	14.7	1	16	14

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Appendix E.3. (p 2 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/1	41	2	15.1	1	16	15
7/1	42	1	15.6	0	0	15
7/1	43	2	14.7	0	0	15
7/1	44	1	14.7	3	49	15
7/1	45	2	15.1	7	111	14
7/1	46	1	14.7	1	16	14
7/1	47	2	14.6	1	16	14
7/1	48	1	15.1	0	0	14
7/2	49	2	14.6	1	16	13
7/2	50	1	14.6	0	0	13
7/2	51	2	14.0	0	0	13
7/2	52	1	15.0	2	32	13
7/2	53	2	15.5	1	16	15
7/2	54	1	15.6	0	0	15
7/2	55	2	15.2	0	0	15
7/2	56	1	15.6	0	0	15
7/3	57	2	14.6	0	0	13
7/3	58	1	14.6	1	16	13
7/3	59	2	14.7	1	16	13
7/3	60	1	14.6	0	0	13
7/3	61	2	14.6	8	132	14
7/3	62	1	14.6	0	0	14
7/3	63	2	14.6	3	49	14
7/3	64	1	14.6	0	0	14
7/4	65	2	14.6	1	16	13
7/4	66	1	14.6	0	0	13
7/4	67	2	14.6	0	0	13
7/4	68	1	14.6	1	16	13
7/4	69	2	15.1	0	0	13
7/4	70	1	14.6	0	0	13
7/4	71	2	14.7	1	16	13
7/4	72	1	14.1	0	0	13
7/5	73	2	15.0	2	32	13
7/5	74	1	14.0	0	0	13
7/5	75	2	14.7	2	33	13
7/5	76	1	14.6	0	0	13
7/5	77	2	15.1	2	32	13
7/5	78	1	14.6	5	82	13
7/5	79	2	14.6	1	16	13
7/5	80	1	14.6	6	99	13

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Appendix E.3. (p 3 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/6	81	2	15.1	2	32	12
7/6	82	1	15.1	2	32	12
7/6	83	2	14.7	4	65	12
7/6	84	1	14.7	8	131	12
7/7	85	2	14.6	0	0	12
7/7	86	1	14.6	5	82	12
7/7	87	2	15.2	1	16	12
7/7	88	1	14.6	8	132	12
7/7	89	2	16.1	47	701	13
7/7	90	1	5.5	2	87	13
7/7	91	2	4.1	11	644	13
7/7	92	1	5.0	2	96	13
7/8	93	2	9.5	0	0	14
7/8	94	1	9.6	9	225	14
7/8	95	2	10.1	3	71	14
7/8	96	1	11.1	30	649	14
7/8	97	2	4.5	11	587	14
7/8	98	1	10.5	12	274	14
7/8	99	2	4.6	17	887	14
7/8	100	1	5.1	2	94	14
7/9	101	2	9.6	1	25	14
7/9	102	1	10.1	13	309	14
7/9	103	2	9.6	8	200	14
7/9	104	1	10.1	7	166	14
7/9	105	2	2.0	6	720	14
7/9	106	1	10.1	4	95	14
7/9	107	2	9.7	29	718	14
7/9	108	1	10.1	0	0	14
7/10	109	2	9.0	9	240	14
7/10	110	1	7.7	20	623	14
7/10	111	2	9.9	17	412	14
7/10	112	1	10.3	14	326	14
7/10	113	2	10.6	25	566	13
7/10	114	1	10.0	29	696	13
7/10	115	2	9.5	37	935	13
7/10	116	1	9.6	21	525	13
7/11	117	2	10.7	90	2019	13
7/11	118	1	8.9	31	836	13
7/12	119	2	10.0	51	1224	14
7/12	120	1	10.5	61	1394	14

-Continued-

Appendix E.3. (p 4 of 4)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/12	121	2	10.0	95	2280	12
7/12	122	1	7.6	87	2747	12
7/13	123	2	9.6	65	1625	13
7/13	124	1	10.2	93	2188	13
7/13	125	2	10.1	23	547	13
7/13	126	1	10.1	36	855	13
7/14	127	2	11.1	37	800	13
7/14	128	1	9.4	57	1455	13
7/14	129	2	9.6	13	325	13
7/14	130	1	9.5	5	126	13
7/15	131	2	10.1	18	428	13
7/15	132	1	7.6	29	916	13
7/15	133	2	10.5	17	389	15
7/15	134	1	7.6	12	379	15
7/16	135	2	10.1	14	333	14
7/16	136	1	9.1	10	264	14
7/16	137	2	9.6	1	25	15
7/16	138	1	9.6	17	425	15
7/17	139	2	9.7	2	50	15
7/17	140	1	9.6	5	125	15
7/17	141	2	10.2	3	71	15
7/17	142	1	10.1	16	380	15
7/18	143	2	9.7	5	124	14
7/18	144	1	10.1	8	190	14
7/18	145	2	10.2	14	329	14
7/18	146	1	10.2	22	518	14

<sup>1</sup> Two afternoon drifts missed. Skiff stuck, high and dry.

Appendix E.4. Sockeye salmon test-fishing data, Igushik River, 1998.

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/16	1	1	12.5	0	0	11
6/16	2	2	10.0	0	0	11
6/16	3	1	14.5	0	0	11
6/16	4	2	12.8	0	0	11
6/16	5	1	14.0	0	0	11
6/16	6	2	12.2	0	0	11
6/16	7	1	14.0	0	0	11
6/16	8	2	13.0	0	0	11
6/17	9	1	14.0	0	0	11
6/17	10	2	14.4	0	0	11
6/17	11	1	14.0	0	0	11
6/17	12	2	14.1	0	0	11
6/17	13	1	13.9	0	0	12
6/17	14	2	12.9	0	0	12
6/17	15	1	15.0	0	0	12
6/17	16	2	14.3	0	0	12
6/18	17	1	13.9	0	0	13
6/18	18	2	14.1	0	0	13
6/18	19	1	15.3	0	0	13
6/18	20	2	12.2	0	0	13
6/18	21	1	8.7	0	0	13
6/18	22	2	8.0	0	0	13
6/19	23	1	11.0	0	0	12
6/19	24	2	11.0	0	0	12
6/19	25	1	11.5	0	0	12
6/19	26	2	11.9	0	0	12
6/19	27	1	12.0	0	0	13
6/19	28	2	11.1	0	0	13
6/19	29	1	11.1	0	0	13
6/19	30	2	11.0	0	0	13
6/20	31	1	12.0	0	0	12
6/20	32	2	12.1	0	0	12
6/20	33	1	13.2	0	0	12
6/20	34	2	13.6	0	0	12
6/21	35	1	12.0	0	0	11
6/21	36	2	12.0	0	0	11
6/21	37	1	13.1	0	0	11
6/21	38	2	13.1	0	0	11
6/21	39	1	10.0	0	0	11
6/21	40	2	12.9	0	0	11

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Appendix E.4. (p 2 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/21	41	1	10.0	0	0	11
6/21	42	2	14.1	0	0	11
6/22	43	1	15.4	0	0	12
6/22	44	2	8.6	0	0	12
6/22	45	1	14.9	0	0	12
6/22	46	2	11.8	0	0	12
6/23	47	1	14.3	0	0	12
6/23	48	2	13.4	0	0	12
6/23	49	1	14.2	0	0	12
6/23	50	2	12.7	0	0	12
6/23	51	1	10.1	0	0	12
6/23	52	2	11.9	0	0	12
6/23	53	1	8.4	0	0	12
6/23	54	2	11.0	0	0	12
6/24	55	1	12.2	0	0	12
6/24	56	2	12.5	0	0	12
6/24	57	1	12.4	0	0	12
6/24	58	2	12.4	0	0	12
6/24	59	1	12.9	0	0	13
6/24	60	2	12.1	2	40	13
6/24	61	1	10.3	0	0	13
6/24	62	2	10.1	2	46	13
6/25	63	1	14.1	0	0	12
6/25	64	2	12.2	0	0	12
6/25	65	1	16.2	0	0	12
6/25	66	2	11.3	0	0	12
6/25	67	1	12.2	0	0	13
6/25	68	2	10.0	2	48	13
6/25	69	1	13.0	1	19	13
6/25	70	2	16.5	15	218	13
6/26	71	1	12.3	0	0	12
6/26	72	2	13.2	1	18	12
6/26	73	1	12.5	0	0	12
6/26	74	2	17.3	7	97	12
6/26	75	1	12.1	0	0	13
6/26	76	2	10.3	6	140	13
6/26	77	1	11.3	0	0	13
6/26	78	2	12.0	3	61	13
6/27	79	1	13.2	0	0	13
6/27	80	2	12.0	0	0	13

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Appendix E.4. (p 3 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
6/27	81	1	13.2	0	0	13
6/27	82	2	12.1	0	0	13
6/27	83	1	10.3	0	0	13
6/27	84	2	12.3	0	0	13
6/27	85	1	13.8	0	0	13
6/27	86	2	14.0	3	51	13
6/28	87	1	13.3	1	18	13
6/28	88	2	10.2	1	24	13
6/28	89	1	12.3	4	78	13
6/28	90	2	14.2	4	68	13
6/28	91	1	10.3	2	47	15
6/28	92	2	12.0	4	79	15
6/28	93	1	13.8	2	35	15
6/28	94	2	13.0	5	92	15
6/29	95	1	12.3	0	0	14
6/29	96	2	12.3	0	0	14
6/29	97	1	13.3	0	0	14
6/29	98	2	13.0	2	37	14
6/29	99	1	14.3	1	17	15
6/29	100	2	12.3	1	20	15
6/29	101	1	12.5	2	38	15
6/29	102	2	12.3	1	20	15
6/30	103	1	12.8	4	75	15
6/30	104	2	11.3	0	0	15
6/30	105	1	12.0	4	80	15
6/30	106	2	13.3	2	36	15
6/30	107	1	11.0	0	0	16
6/30	108	2	12.3	5	99	16
6/30	109	1	11.3	1	22	16
6/30	110	2	13.3	12	219	16
7/1	111	1	12.3	0	0	15
7/1	112	2	5.0	2	96	15
7/1	113	1	12.3	1	20	15
7/1	114	2	14.0	4	69	15
7/1	115	1	11.8	4	81	16
7/1	116	2	12.0	2	40	16
7/1	117	1	13.0	4	73	16
7/1	118	2	12.3	14	274	16
7/2	119	1	12.5	12	230	15
7/2	120	2	9.5	25	632	15

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Appendix E.4. (p 4 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/2	121	1	9.0	27	720	15
7/2	122	2	9.3	24	619	15
7/2	123	1	8.3	58	1677	15
7/2	124	2	7.8	53	1631	15
7/2	125	1	9.3	24	619	15
7/2	126	2	7.8	82	2523	15
7/3	127	1	7.5	40	1280	15
7/3	128	2	7.3	51	1678	15
7/3	129	1	6.5	36	1329	15
7/3	130	2	6.0	101	4040	15
7/4	131	1	8.3	40	1157	15
7/4	132	2	7.3	61	2006	15
7/4	133	1	9.3	20	516	15
7/4	134	2	8.0	78	2340	15
7/4	135	1	8.3	32	925	15
7/4	136	2	9.3	42	1084	15
7/4	137	1	10.3	54	1258	15
7/4	138	2	8.5	89	2513	15
7/5	139	1	12.3	5	98	15
7/5	140	2	6.3	35	1333	15
7/5	141	1	12.5	3	58	15
7/5	142	2	8.5	60	1694	15
7/5	143	1	6.8	24	847	15
7/5	144	2	6.5	45	1662	15
7/5	145	1	8.3	38	1099	15
7/5	146	2	8.0	62	1860	15
7/6	147	1	12.3	3	59	15
7/6	148	2	10.5	19	434	15
7/6	149	1	13.3	1	18	15
7/6	150	2	12.5	43	826	15
7/6	151	1	9.0	23	613	15
7/6	152	2	11.3	26	551	15
7/6	153	1	12.3	27	527	15
7/6	154	2	11.3	22	467	15
7/7	155	1	9.3	14	363	15
7/7	156	2	7.5	46	1472	15
7/7	157	1	12.5	8	154	15
7/7	158	2	11.5	13	271	15
7/7	159	1	7.5	57	1824	15
7/7	160	2	12.3	29	565	15

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Appendix E.4. (p 5 of 5)

Date	Set No.	Station	Mean Fishing Time(min)	Sockeye Catch	Test Fishing Index	Water Temp(C)
7/7	161	1	7.5	46	1472	15
7/7	162	2	9.5	61	1541	15
7/8	163	1	11.5	7	146	15
7/8	164	2	8.0	58	1740	15
7/8	165	1	11.3	0	0	15
7/8	166	2	6.5	33	1219	15
7/8	167	1	11.3	19	404	15
7/8	168	2	6.3	33	1257	15
7/8	169	1	11.5	33	689	15
7/8	170	2	10.3	32	746	15
7/9	171	1	12.3	0	0	15
7/9	172	2	8.0	28	840	15
7/9	173	1	12.3	0	0	15
7/9	174	2	8.3	32	925	15
7/9	175	1	11.3	3	64	15
7/9	176	2	11.3	6	127	15
7/9	177	1	11.3	17	361	15
7/9	178	2	9.3	13	336	15
7/10	179	1	11.5	1	21	15
7/10	180	2	11.0	5	109	15
7/10	181	1	12.3	0	0	15
7/10	182	2	11.3	5	106	15
7/10	183	1	10.3	15	350	15
7/10	184	2	11.3	7	149	15
7/10	185	1	11.3	19	404	15
7/10	186	2	11.3	16	340	15
7/11	187	1	11.5	3	63	14
7/11	188	2	11.3	14	297	14
7/11	189	1	11.5	3	63	14
7/11	190	2	11.5	12	250	14
7/11	191	1	12.3	19	371	15
7/11	192	2	11.3	0	0	15
7/11	193	1	11.3	15	319	15
7/11	194	2	11.3	8	171	15
7/12	195	1	11.3	0	0	15
7/12	196	2	11.3	2	43	15
7/12	197	1	13.5	2	36	15
7/12	198	2	11.3	11	234	15
7/12	199	1	11.8	11	224	16
7/12	200	2	11.5	7	147	16
7/12	201	1	12.5	16	307	16
7/12	202	2	9.3	15	387	16

Appendix F.1. Kvichak River sockeye salmon test-fishing data, 1979 - 1998.

Year	Travel Time (d)	Cumulative Index	Last Date Fished	EPI <sup>1</sup>	Cumulative Tower Count	Date <sup>2</sup>	Data Reference
1979 <sup>3</sup>	2	21,901	6/29	243	5,330,532	7/1	Meacham (1980)
1980	2	106,315	7/9	174	18,508,524	7/11	Bue & Meacham (1981)
1981	2	20,813	7/1	83	1,723,506	7/13	Bue (1982)
1982	2	17,718	7/21	63	1,119,996	7/23	Bue (1984)
1983	2	13,234	7/12	216	2,853,198	7/14	Yuen (1985)
1984	3	45,584	7/12	222	10,111,152	7/15	Yuen et al. (1985)
1985 <sup>4</sup>	5	41,649	7/16	171	7,120,506	7/23	Bue et al. (1988)
1986	1	25,923	7/15	43	1,102,242	7/16	Yuen et al. (1988)
1987	2	55,881	7/14	106	5,945,994	7/16	Fried & Bue (1988a)
1988	1	38,743	7/17	104	4,045,500	7/18	Fried & Bue (1988b)
1989	2	58,044	7/16	141	8,163,918	7/18	Stratton et al (1990)
1990	3	44,794	7/15	149	6,673,872	7/18	Stratton (1990)
1991	2	56,669	7/17	71	4,114,932	7/19	Stratton & Woolington (1992)
1992	4	46,755	7/16	100	4,686,828	7/20	Stratton & Crawford (1994)
1993	1	47,449	7/20	84	4,007,712	7/21	Stratton & Crawford (1996)
1994	2	55,073	7/15	142	7,631,076	7/17	Current Report
1995	2	62,556	7/18	154	9,702,972	7/20	Current Report
1996	2	18,089	7/17	77	1,396,710	7/19	Current Report
1997	2	25,228	7/16	58	1,434,504	7/18	Current Report
1998	2	25,041	7/16	91	2,290,584	7/18	Current Report

<sup>1</sup> EPI value from travel time analysis on the final day of test fishing.

<sup>2</sup> Cumulative spawning escapement date is last date fished at test fishing site plus travel time to tower site.

<sup>3</sup> Sites used from 1979 - 1984 were located on west bank above Nakeen (site 1), and on east bank about 2 km above Sea Gull Flat Island.

<sup>4</sup> Data from 1985 to present may not be comparable with those from 1979 - 1984. Test fishing sites were relocated in 1985 about 20 km upriver from old sites, and changes were made in mesh size (from 13.65 cm to 12.7 cm) and in web material (from multifilament nylon to multistrand monofilament).

Appendix F.2. Egegik River sockeye salmon test-fishing data, 1979 - 1998.

Year	Travel Time (d)	Cumulative Index	Last Date Fished	EPI <sup>1</sup>	Cumulative Tower Count	Date <sup>2</sup>	Data Reference
1979 <sup>3</sup>	1	23,980	7/10	38	905,034	7/11	Meacham (1980)
1980	4	13,312	7/16	80	1,060,860	7/20	Bue & Meacham (1981)
1981	3	18,921	7/13	37	691,764	7/16	Bue (1982)
1982	3	30,361	7/12	34	1,029,684	7/15	Bue (1984)
1983	1	16,276	7/10	44	718,368	7/11	Yuen (1985)
1984	3	26,947	7/12	43	1,151,028	7/15	Yuen et al. (1985)
1985 <sup>4</sup>	4	19,974	7/9	53	1,052,250	7/13	Bue et al. (1988)
1986	1	16,370	7/14	60	981,841	7/15	Yuen et al. (1988)
1987	2	21,810	7/14	53	1,162,464	7/16	Fried & Bue (1988a)
1988	1	21,024	7/16	76	1,591,752	7/17	Fried & Bue (1988b)
1989	3	30,343	7/12	52	1,590,234	7/15	Stratton et al (1990)
1990	3	17,578	7/16	123	2,155,062	7/19	Stratton (1990)
1991	4	31,066	7/12	88	2,722,476	7/16	Stratton & Woolington (1992)
1992	3	24,498	7/11	73	1,795,542	7/14	Stratton & Crawford (1994)
1993	1	17,189	7/10	78	1,346,160	7/11	Stratton & Crawford (1996)
1994	2	12,777	7/12	137	1,708,998	7/14	Current Report
1995	2	11,769	7/12	100	1,139,724	7/14	Current Report
1996	2	15,043	7/12	72	1,039,428	7/14	Current Report
1997	2	20,136	7/12	52	1,051,500	7/14	Current Report
1998	3	16,476	7/13	65	1,032,480	7/16	Current Report

<sup>1</sup> EPI value from travel time analysis on the final day of test fishing.

<sup>2</sup> Cumulative spawning escapement date is last date fished at test fishing site plus travel time to tower site.

<sup>3</sup> Sites used from 1979 - 1998 were located about 3 km upriver from tip of Egg Island on the south (site 1), and on the north bank (site 2).

<sup>4</sup> Data from 1985 to present may not be comparable with those from 1979 - 1984 because changes were made in gillnet mesh size (from 13.65cm to 13.02 cm) and in web material (from multifilament nylon to multistrand monofilament).

Appendix F.3. Ugashik River sockeye salmon test-fishing data, 1979 - 1998.

Year	Travel Time (d)	Cumulative Index	Last Date Fished	EPI <sup>1</sup>	Cumulative Tower Count	Date <sup>2</sup>	Data Reference
1979 <sup>3</sup>	9	42,880	7/13	39	1,662,348	7/22	Meacham (1980)
1980	3	85,711	7/17	30	2,550,174	7/20	Bue & Meacham (1981)
1981 <sup>4</sup>	3	73,861	7/16	18	1,304,022	7/19	Bue (1982)
1982 <sup>5</sup>	4	48,057	7/15	23	1,120,680	7/19	Bue (1984)
1983	1	15,485	7/16	54	831,744	7/17	Yuen (1985)
1984	8	20,138	7/17	61	1,223,286	7/25	Yuen et al. (1985)
1985 <sup>6</sup>	7	30,903	7/16	32	997,026	7/26	Bue et al. (1988)
1986	9	36,786	7/15	27	1,001,492	7/24	Yuen et al. (1988)
1987 <sup>7</sup>	6	14,393	7/17	41	587,964	7/23	Fried & Bue (1988a)
1988	2	16,106	7/24	39	625,752	7/26	Fried & Bue (1988b)
1989	5	36,562	7/21	46	1,669,350	7/26	Stratton et al (1990)
1990	3	20,113	7/20	34	692,310	7/23	Stratton (1990)
1991	4	27,359	7/15	82	2,255,216	7/19	Stratton & Woolington (1992)
1992	2	21,601	7/18	92	1,997,058	7/20	Stratton & Crawford (1994)
1993	2	14,793	7/13	87	1,292,046	7/15	Stratton & Crawford (1996)
1994	1	8,180	7/17	94	766,638	7/18	Current Report
1995	3	9,609	7/17	66	1,136,262	7/20	Current Report
1996	2	18,617	7/18	36	610,926	7/20	Current Report
1997	3	21,969	7/18	22	481,356	7/21	Current Report
1998	2	8,243	7/18	71	589,920	7/20	Current Report

<sup>1</sup> EPI value from travel time analysis on the final day of test fishing.

<sup>2</sup> Cumulative spawning escapement date is last date fished at test fishing site plus travel time to tower site.

<sup>3</sup> Three sites used from 1979 - 1980 located about 1 km downriver from Ugashik Village on east bank (site 1), and on the west bank about 4 km and 5 km upriver from Ugashik Village (sites 2 & 3, respectively).

<sup>4</sup> Two sites used beginning 1981 located on east bank about 7 km upriver from Ugashik Village (site 1) and on west bank about 8 km upriver from Ugashik Village (site 2).

<sup>5</sup> Site 1 moved to east bank about 5 km upriver from Ugashik Village and Site 2 moved to west bank about 5 km upriver from Ugashik Village.

<sup>6</sup> Data from 1985 to present may not be comparable with those from 1979 - 1984 because changes were made in gillnet mesh size (from 13.65cm to 13.02 cm) and in web material (from multifilament nylon to multistrand monofilament).

<sup>7</sup> Site 1 moved to east bank about 8 km upriver from Ugashik Village and Site 2 moved to west bank about 8 km upriver from Ugashik Village.

Appendix F.4. Igushik River sockeye salmon test-fishing data, 1979 - 1998.

Year	Travel Time (d) <sup>1</sup>	Cumulative Index	Last Date Fished	EPI <sup>2</sup>	Cumulative Tower Count	Date <sup>3</sup>	Data Reference <sup>4</sup>
1979 <sup>5</sup>	2	45,013	7/13	17	787,542	7/15	Meacham (1980)
1980	4	38,673	7/15	50	1,945,758	7/19	Bue & Meacham (1981)
1981	4	37,975	7/14	14	532,896	7/18	Bue (1982)
1982	5	12,638	7/12	33	411,420	7/17	Bue (1984)
1983	4	15,322	7/13	11	161,754	7/17	Yuen (1985)
1984	3	25,743	7/14	6	162,054	7/17	Yuen et al. (1985)
1985 <sup>6</sup>	5	15,347	7/11	13	199,386	7/16	Bue et al. (1988)
1986	4	18,288	7/14	14	262,104	7/18	Yuen et al. (1988)
1987	5	6,609	7/14	21	138,186	7/19	Fried & Bue (1988a)
1988 <sup>7</sup>	2	6,186	7/13	26	160,446	7/15	Fried & Bue (1988b)
1989	1	11,802	7/8	25	296,658	7/9	Stratton et al (1990)
1990 <sup>8</sup>							
1991	3	7,431	7/15	97	721,314	7/18	Stratton & Woolington (1992)
1992	4	5,175	7/13	56	289,644	7/17	Stratton & Crawford (1994)
1993	6	511	7/11	760	388,512	7/17	Stratton & Crawford (1996)
1994	2	2,343	7/13	108	253,044	7/15	Current Report
1995	2	3,609	7/8	105	378,945	7/10	Current Report
1996	3	5,295	7/12	62	328,290	7/15	Current Report
1997	3	10,543	7/14	12	126,516	7/17	Current Report
1998	2	9,080	7/12	19	172,520	7/14	Current Report

<sup>1</sup> Estimates for 1979-83 based on correlation coefficients; estimates for 1984-98 based on travel time analysis.

<sup>2</sup> EPI value from travel time analysis on the final day of test fishing.

<sup>3</sup> Cumulative spawning escapement date is last date fished at test fishing site plus travel time to tower site.

<sup>4</sup> Weighted season mean length, weight, travel time, and EPI values for 1979-86 were recalculated for 1987 report (Fried and Bue 1988a), and may differ from those in original report.

<sup>5</sup> One site, located on south bank about 30 km upriver from district boundary, was used from 1977-84.

<sup>6</sup> Site 1 moved to south bank about 28 km upriver from district boundary and site 2 added on north bank about 27 km upriver from district boundary.

<sup>7</sup> Data from 1988 to present may not be comparable with those from 1979-87 because of changes in fishing method (drifting gill net rather than anchoring one end on shore).

<sup>8</sup> Igushik test fish project not operated in 1990 due to budget cuts.

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